

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office.

VOL. LVII. No. 26.
WEEKLY.

BALTIMORE, JULY 7, 1910

\$4.00 A YEAR.
{ SINGLE COPIES, 15 CENTS.

Manufacturers' Record.

PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS' RECORD PUBLISHING CO.
BALTIMORE.

RICHARD H. EDMONDS, President.
FRANK GOULD, Vice-President.
VICTOR H. POWER, Treasurer.
I. S. FIELD, Secretary.

RICHARD H. EDMONDS,
Editor and General Manager.

EDWARD INGLE, Managing Editor.

ALBERT PHENIS,
General Staff Correspondent.

Branch Offices:

New Orleans—1012 Maison Blanche.
New York—52 Broadway.
Boston—643 Old South Building.
Chicago—1116 Fisher Building.
St. Louis—542 Century Building.

Subscription, - - - - - \$4 a year
(payable in advance) to United States,
Mexico, Cuba, Porto Rico, Hawaii and the
Philippines.

To Foreign Countries (including Canada) in
the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as sec-
ond-class matter.]

BALTIMORE, JULY 7, 1910.

COTTON COMPETITION.

Spruce tree pulp might be handled in such a manner and in such quantity as to furnish material for cloth to compete with cotton goods if only spruce trees were plentiful enough.

FAME.

The vacancy in the chancellorship of New York University is the opportunity to give Southern "educational statesmen" temporary magnitude among the locally uninformed by mentioning them as candidates for the position. It has been done before, but most folks usually forget.

WHY AN ANNUAL SESSION?

Cynics inclined to misinterpret the Georgia Legislature's unwillingness to quit its annual sessions are rebuked by that midsummer body's desire to pass a stringent and drastic anti-prize-fight law. If any other matter besides the Reno disgrace had happened to be occupying public attention, the Georgia Legislature would undoubtedly have passed a law dealing with it.

PREACHING MORALITY.

Metropolitan newspapers that have attempted to justify their publication of pages of disgusting details about the exhibition of brutality at Reno, on the ground that thereby they were promoting morality, would have been capable of advocating Sodom and Gomorrah as camp-meeting sites. Their sincerity will be indisputable, however, if their powerful influence is exerted to make impossible in the country moving-pic-

ture reproductions of the disgrace to American civilization.

A LIVING WITHOUT WORKING FOR IT.

An old darkey driving a cab horse which stopped in every block, apparently anxious to find the end of his journey, was asked if his horse was sick, and his answer was:

No, boss, he ain't sick. He is just doing like lots of folks. He is just trying to get a living without working for it.

The world is full of men and boys who, like the old horse, are trying to get a living without working for it. They do a little work; they travel along for a short distance and then they stop, discontented, or with some kind of an excuse to keep from working, hoping to be able to get a living without earning it.

What a contrast between the horse that stops in every block, and has to be urged on, and the thoroughbred horse that, if need be, will go at full speed until he drops in his tracks! The contrast is equally as great between the man or the boy who halts, or hesitates over his work, is slow and idle about it; who never originates or initiates anything, but in a humdrum way plods along, anxious for every chance to quit, and the boy or the man who goes at his work with eager zest, determined to conquer.

THE HUMAN ELEMENT MORE IMPORTANT THAN NATURAL RESOURCES.

Dr. C. Willard Hayes, Chief Geologist, United States Geological Survey, in an exceedingly interesting article published in the MANUFACTURERS' RECORD last week, discussing the great resources of the South and the opportunity for industrial development, said:

To insure the introduction and profitable development of industries for the utilization of these resources foreign capital is needed, but a greater need is for the skill and experience which have built up successful industries elsewhere. Both the capital and the skill will be forthcoming in abundance if the opportunities are adequately presented and if they are assured of a genuine welcome and proper protection. Mere toleration or a half-hearted welcome will never bring the industries, even with the exceptional inducements which natural conditions offer. The human element thus becomes the determining factor in the problem.

The "human element," as Dr. Hayes expresses it, is more important than natural resources. The human element has created the vast development of New England without natural resources. The human element, allied with the great resources of the South, would make possible the development of wealth beyond anything known in this country today.

The South must learn the lesson suggested by Dr. Hayes, that outside men and money must receive not mere toleration nor a half-hearted welcome, but a genuine welcome and the assurance of ample protection. Not protection simply to life, nor to the capital invested, but protection from the petty annoy-

ances which sometimes are worse than real antagonism. The people of the South must learn to welcome the stranger with the thoroughness and sincerity with which he is welcomed on the Pacific coast, or in the rapidly developing regions of the Northwest and of Canada. No half-hearted toleration will do. If the South wants to free itself from its present dependence upon negro labor (and through this freedom the negro himself will be benefited by competition with other people), it must not simply pass resolutions and talk about the importance of immigration, but it must work for immigration and it must individually and unitedly give the heartiest welcome and the amplest protection to the newcomer. He must be made to feel that he will not be mistreated; that if he is an ignorant day laborer from abroad he will not be made the means of increasing the revenue of officers operating under the accursed fee system. He must be made to feel safe. He must know that through the protection and friendship of those about him that he is welcome, and that the country in which he has cast his lot will see that he has every possible protection to life and the opportunity of employment, and to property. The capital coming to the South must have an absolute assurance of freedom from the petty annoyances of the politicians who seek to live off of others. It must know that while it will not have free and unobstructed sway to do its own will, it will be guarded and protected from any unjust treatment.

Boundless as are the South's resources, vast as are its potentialities for the creation of wealth and the employment of people, they will be all buried talents, valueless to their owners and valueless to the South, unless utilized for the betterment of mankind. Only the human element can make possible the development of these buried talents to the enrichment of the individual, the section and the nation.

FOR STATE PRESERVATION.

At last the natural and expected protest has been made against the immigration from New York city to portions of the Southwest, taking form in placing in homes of Texas and Louisiana foundlings from New York asylums. False notions of humanitarianism have doubtless delayed the protest, but it came with force at a recent meeting of medical officials of Louisiana in connection with the statement of Dr. Pierson, superintendent of the Mississippi Insane Asylum:

The deposit of these helpless little creatures, coming possibly unknown from tainted progenitors into our midst, is simply planting the seed of greater degeneration, more defectives, idiots, imbeciles and alcoholics and to demoralization and heartaches in homes where these little creatures are located.

The average foundling is, *ipso facto*, the record of a crime against society. That the child is an innocent record does not lessen its importance as a possible and probable addition to the bur-

den of society endeavoring to purge itself of tendencies to crime. In justice to itself and to its innocent harvest of sins and crimes of the past, each State is bound to leave nothing undone to correct existing ills and to prevent the increase or continuance. To that task must be brought all the resources of science, wealth and real philanthropy available. Too much time, money, energy and love of fellows cannot be spent upon it. But it calls for no shifting of responsibility upon the shoulders of others. That is the rankest sort of cowardly selfishness. There is too much of that spirit in New York "philanthropy" directed upon the South and Southwest.

CONSTANT EXPANSION IN SOUTHERN DEVELOPMENT.

As an indication of the constant progressive material development of the South, the MANUFACTURERS' RECORD would call particular attention to the 27,566 items of industrial and railroad operations and construction work, including building enterprises ranging from dwellings to great warehouses and skyscraper hotels and office buildings, published weekly in its columns, and also daily in the *Daily Bulletin* of the MANUFACTURERS' RECORD, during the first six months of the year.

This is a remarkable showing. As stated in previous reviews of this character, it is not intended to convey the impression that each one of these items represents a new enterprise, but it does represent specific important facts regarding new enterprises, the enlargement of existing plants, building operations, construction work and similar undertakings. In the Construction Department of the MANUFACTURERS' RECORD, and in its *Daily Bulletin*, it often happens that the same enterprise is mentioned several times, following it from its first inception to the final letting of the contracts for its completion. But every item represents tangible information of value to men who are seeking to do business. Here is the great storehouse of information regarding the industrial and construction activities of the wide territory which stretches from Maryland out to Texas and Oklahoma. Out of this mine there is scarcely a single line of business in the country which could not draw profit by proper effort. These items represent new enterprises in every line of human endeavor. They represent the building of railroads, of factories, municipal improvements of every character, construction of roads, the reclamation of land and similar undertakings. These 27,566 items really tell a wonderful story of the possibilities of business to all lines, from the printer who provides the stationery to the coal operator who furnishes the fuel with which to run the finished plant. They indicate something of the extent of the new market that has been created by the establishment of these industries and the enlargement of existing plants for every kind

of machinery made, for building materials, for everything which enters into the construction and furnishing of office buildings, hotels, municipal buildings, private dwellings, and for supplies covering almost every kind of material needed. The business man, merchant or manufacturer who fails to study facts such as are presented in every issue of the *Daily Bulletin* and the *MANUFACTURERS' RECORD* gains no idea of the "acres of diamonds" around him, but of which he makes no use. Thousands of enterprising men in every line of industry do study these facts with close attention, and out of this mine draw an ever-increasing wealth of new business.

The facts as to these 27,566 items are comprehensively presented in the following condensed statement:

Synopsis of Construction Department, MANUFACTURERS' RECORD, covering the months of January, February, March, April, May and June, 1910.

Total of Items to July 1.....	27,566
January.....	3,930
February.....	4,987
March.....	5,136
April.....	4,559
May.....	4,671
June.....	4,383

Construction.....	22,686
Machinery, Proposals and Supplies Wanted.....	3,725
Burned, etc.....	855

Divided in detail as follows:

Bridges, Culverts, Viaducts.....	457
Canning and Packing Plants.....	120
Clayworking Plants.....	183
Coal Mines and Coke Ovens.....	307
Concrete and Cement Plants.....	51
Cotton Compresses and Gins.....	215
Cottonseed-oil Mills.....	122
Drainage and Irrigation.....	144
Electric-light and Power.....	659
Fertilizer Factories.....	88
Flour, Feed and Meal Mills.....	132
Foundry and Machine Plants.....	285
Gas and Oil Developments.....	315
Ice and Cold-storage Plants.....	295
Iron and Steel Plants.....	54
Land Developments.....	570
Lumber Manufacturing.....	716
Metal-working Plants.....	59
Mining.....	350
Miscellaneous Construction.....	185
Miscellaneous Enterprises.....	1,187
Miscellaneous Factories.....	1,420
Railway Shops, Terminals, Round-houses, Sheds, etc.....	123
Road and Street Work.....	1,693
Sewer Construction.....	488
Telephone Systems.....	290
Textile Mills.....	295
Water-works.....	749
Woodworking Plants.....	382

Railways.	
Steam.....	1,690
Street.....	209

Buildings.	
Apartment-houses.....	406
Association and Fraternal.....	277
Bank and Office.....	779
Churches.....	836
City and County.....	442
Courthouses.....	130
Dwellings.....	2,264
Government and State.....	181
Hotels.....	457
Miscellaneous Structures.....	483
Railway Stations.....	230
Schools.....	1,515
Stores.....	1,300
Theaters.....	177
Warehouses.....	395
Burned.....	855

Machinery, Proposals and Supplies Wanted.....	3,725
	27,566

Machinery, Proposals and Supplies Wanted list contains 94 foreign wants, the countries represented including Canada, Mexico, Panama, Porto Rico, Cuba, Argentina, Chile, Uruguay, Guatemala, Australia, England, Holland, Germany, France, Spain, Italy, Austria, Hungary, Russia, Turkey, Greece, China and Africa.

EASY.

Referring to two recent heavy and unexplainable selling movements in Wall Street several days before "official" news from Washington calculated to excite alarm and the depression of speculative values, *Financial America* says:

It is not our purpose here to comment upon coincidences which might well merit a rigid investigation by the Washington Administration in order to assure the country that there were no news "leaks" from important departments by which the public interests and the public service were prostituted to the cupidity of unscrupulous Wall Street stock gamblers.

An investigation, not by, but of the Washington Administration, would seem

to be the proper procedure. It ought to be an easy matter to determine. Only a very few persons could possibly have had advance knowledge of steps that agents of the people were to take. It should not be a difficult matter to place the responsibility for "leaks" if they have occurred. And what are \$5000 fines imposed years afterward, as in the case of the cotton-crop leaks?

THE TYRANNY OF THE NICKEL.

Everywhere in the United States the street-car fare is five cents. It may be that there are a few exceptions to the rule, but the general public does not know of them, and therefore the statement that a street-car ride can be purchased for a nickel anywhere in this country is for practical purposes correct. Public demand is in a large degree responsible for the five-cent fare, just as it is for the 25 and 50-cent table-d'hôte restaurants, although the latter are growing fewer and sometimes poorer with the increasing cost of food supplies. But there is no change for the worse in the street-car service given in return for the humble nickel; on the contrary, it is improving year by year in most of our cities and towns, although it appears, judging by the utterances of railway officials, that the costs of maintenance and operation are steadily increasing.

Because of its convenience the nickel is enshrined in the affections of our people, of course excepting those who want six rides for a quarter or others who are already enjoying that cheaper rate of fare. Therefore, any effort to abolish the five-cent piece in its present relation to street-car riding would arouse widespread opposition and endanger heated animosities between the public and the street-railway companies, all of which would be undesirable from any point of view. Hence the nickel is in somewhat of an impregnable position with respect to urban transportation and is likely to indefinitely exercise its tyranny over the affairs of the railways, whose officers, in many instances, would like to raise the fare rate in order to offset the increased cost of conducting business.

Not long ago President G. W. Wattles of the Omaha & Council Bluffs Street Railway Co., Omaha, Neb., said that 40 years ago in that city five cents was the cost of a one-mile ride in a horse car. In 1872 the ride was increased to two miles for a nickel. In 1888 the ride was three miles, and the cars were operated both by cable traction and by horses. Ten years later electric cars had been substituted and the ride was eight miles for five cents. Now the nickel pays for a maximum ride of 12 miles, and the equipment is of the very best, the cars being equipped with air brakes and they are heated in winter by hot water. Mr. Wattles further says that beyond a certain limit (about five miles) no profit is made on a passenger who has paid a five-cent fare, and he is carried at a loss to the company. In his recent annual report to the stockholders President William A. House of the United Railways & Electric Co. of Baltimore said:

One of the most vital questions at present affecting street-railway companies is the rigidity of fares. The seller of a commodity can usually increase its price as the cost of production increases. Even the steam roads can to some extent increase their rates to meet increased cost of transportation. But this has not been true of electric railways. * * * Within a few years the possible length of a five-cent ride has been very nearly doubled and the running time between given points has been materially

shortened. * * * To give the passengers their longer ride and quicker transportation your company has had to increase the expense per passenger for equipment, for maintenance and for power. * * * The cost of rolling stock and construction materials has advanced more rapidly, perhaps, than the cost of any other commodities; moreover, the improvement in service has necessitated a more liberal investment in both rolling stock and construction materials, yet the fare, with the present high grade of this commodity, is too low. This is the great problem that now confronts electric-railway companies, and ultimately there will have to be a readjustment of rates in order to solve it.

Conditions in Baltimore, it must be remembered, are peculiar. The street-railway company (there is only one, representing a consolidation of several corporations) is subject to a city tax of 9 per cent. on its gross receipts for park purposes, besides the other usual taxes on its property. The company is required by law to give one free transfer on every five-cent fare upon request, and this practically affords the individual transportation from any part of the city to any other part for the payment of one fare. Not only is this true, but the single-fare rate in several instances covers transportation to points well outside the city limits. In consequence of this the suburbs of Baltimore have rapidly developed during the last five or ten years and are still fast building up.

But the United Railways & Electric Co. of Baltimore is not the only street-railway company which feels the tyranny of the nickel carfare. In other parts of the country similar complaints from public-service corporations are heard. Conditions are, perhaps, easier for a system with a large business than they are for a company of only moderate size and receipts. Frequent service at the five-cent rate is what the public generally demands, and if the cars can run well filled it may not be so bad for a road, but if for a considerable portion of each day travel is very light, the company must suffer, because the equipment is not earning a profitable average per trip.

Undoubtedly the street-car companies have a hard problem before them. Suppose the average fare be raised to six cents, would there be such a falling off in travel as to more than offset the advantage of increasing the fare per passenger? Or suppose the zone system be adopted and the five-cent fare prevail within certain territory, with an additional fare to outside points. Again, suppose a charge be made for transfers, would that gain or lose money for a road? With increased cost of living in almost every other direction, it is not surprising that street railways are also endeavoring to secure greater net income to make ends meet. We do not believe they can ever raise their fares; certainly not without a long struggle and practical bankruptcy before the public would yield. Under these conditions, and with the rapid increase in cost of everything that enters into railroad management, the best efforts of street-railroad managers will be taxed to improve their service without increasing its cost to the public. Their position is entirely unlike that of steam roads, where an advance in rates can probably be made and maintained.

Mr. A. C. Jones, electrical engineer and contractor, Opelousas, La., writes to the *MANUFACTURERS' RECORD*:

Your paper is the only means I have of keeping in touch with the business situation around here, and I do not like to miss a copy of it.

THE PRACTICAL MEANS TO GET DESIRABLE IMMIGRANTS.

A great many speeches have been made and many editorials written about the movement of population from the United States to Canada, as though this is an abnormal situation, and the wonder has been constantly expressed as to why these people have not moved to the South. The reason is simple enough. Canada and the railroads of Canada recognize the value of immigration, provided it is immigration of the right kind. They do not believe that people will rush to Canada of their own accord, so they create the conditions to make employment possible and then they create the machinery for developing an interest in Canada.

In a recent article in the *Technical World Magazine* dealing with what it claims is the greatest colonization movement in history, it is stated that though Canada has more railroad mileage according to population than any other country on earth, it is today enjoying the greatest railroad-building epoch in its history. The great railroad systems of that country are expanding in every direction and vast railroad-building activity is under way. The Government and the railroads, according to this report, have combined for the express purpose of populating a great region and building along a new 1000-mile railroad over 200 new towns. These towns are not merely to be platted and named and left to vegetate; they are to be forced into life by a great game of town building backed by the Government and the railroad. The scheme having been planned, the railroad being under construction and the localities of the towns definitely decided upon, a small army of 300 Canadian land agents are working in the United States night and day for settlers, while in England, Scotland, Ireland and other European countries other agents are carrying out the same kind of work. The railroads and the Government recognize the value of immigrants from the United States. They know how to appeal to the wheat growers of the West. They know how to appeal to the land operators and the town-building investors and speculators. A gigantic campaign is outlined and pushed forward involving the expenditure of thousands and thousands of dollars. Canada and its railroads do not halt at the question of expenditure when it comes to doing business.

No such campaign has ever been undertaken in the South, nor have Southern railroads ever conceived such broad visions of their opportunities as have the railroads of Canada. Thirty or 40 years ago Texas was doing somewhat similar work, and the result is shown in the marvelous trend of population to Texas at that time. Florida did some of the same kind of work 20 years ago, and, like Texas, is beginning again to turn its attention toward this immigration campaign. But the South as a whole has never realized what it means intelligently and persistently, under the most skillful direction of able men and not of broken-down politicians, to carry out a great, broad campaign to get the right class of people and money and industrial interests. With rare exceptions the railroads of the South have had no conception of what they could do and what they ought to do. Most of them have handled the matter in a beggarly way, spending paltry sums, and, of course, getting beggarly returns. Some few of them have recognized the opportunity and have intelligently worked to attract men and money

South. But, broadly speaking, the Southern railroads have been very inefficient in this kind of campaign. The trouble has been that the directors have been niggardly in the amount of money appropriated for such purposes. They have been shortsighted and narrow-minded. Many of them have expected the passenger departments to handle immigration and industrial business, and have expected to see immediate results from every dollar expended. They have thus kept the unfortunate agent, whether he be a passenger agent or an industrial agent, on the tenter hooks, daily anticipating a request for information as to what actual results have been accomplished. The picaresque way in which some of the railroads have gone at this work indicates the inability of many railroad directors to get any grasp of the situation. If the directors were not narrow and shortsighted, they would see that the officials did the work or else they would get new officials. Many railroads have fought to keep other people out of their own territory, and yet have not been willing to provide adequate facilities for its development. On the other hand, some roads have been managed by men of very broad ability—men who recognize the possibilities of the South and to the utmost of their available means have sought to meet the situation. There is room, however, for a very general awakening on the part of the people of the South, the State governments, cities and towns and transportation interests. Unless, however, the campaign for immigration and industrial and agricultural development is managed by broad men, backed by ample money, without any feeling that they must have an immediate showing as to the results, it would be just as well not to enter upon such a campaign. Canada does its work vigorously, unceasingly, under the leadership of its ablest men and at an expenditure of vast sums of money. Canada's example is to be commended. It should be imitated by the South. But such a campaign should involve some millions of dollars annually, and the returns would justify it. Are the people of the South and the railroads big enough to measure up to it?

TO KEEP AT HOME MONEY FOR FOODSTUFFS.

To keep in Alabama \$3,000,000 now annually sent to other States from the Birmingham district for vegetables, poultry and eggs is the interesting and practical problem which the Chamber of Commerce of Birmingham is seeking to solve. As is pointed out in correspondence elsewhere in this issue, there are within twenty miles of Birmingham 240,000 acres of land upon which by careful tillage truck-farming could be advantageously carried on. About 40,000 acres of these lands is owned by industrial corporations, at least one of which has already undertaken to develop truck-farming. Mr. S. Hechinger, secretary of the farm-movement department of the Chamber of Commerce, plans to bring the opportunities for profitable truck-farming to the attention of farmers in the North, East and West, and to make every effort to lead into the district a class of settlers who will become permanent citizens of the State, and will make the most of the opportunity suggested in the \$3,000,000 of sales of foodstuffs now brought from distant points, sales bound to represent greater amounts of money as the population of the Birmingham district increases.

Directly related to this farm move-

ment is the insurance of a steady supply of reliable labor in the industries of the district. Thousands of dollars have been spent in bringing laborers from New York and other points to Birmingham, but many of these were of a type of men who could not be regarded either as a permanent or valuable accession to the population. By inducing families of farmers to take up the available trucking land, it is expected that some of the surplus members of the families, that is, those who have no call to agriculture, will find openings to profitable careers in manufacturing industry, and thereby gradually create a substantial home industrial population.

The Chamber of Commerce plan is attracting wide attention in Alabama, and Captain R. F. Kolb, who is to assume the duties of State Commissioner of Agriculture at the beginning of next year, is inclined to widen the suggestion into an encouragement of diversified agriculture all over the State. The plan is one that other business bodies in the South may well consider. There is hardly a large city in that section which could not place itself in a position of depending only upon its immediate country surroundings to supply it with vegetables, poultry, eggs, etc. Such a plan successful would mean greater prosperity for everybody concerned, and closer relations between cities and their environs.

ANOTHER "SOUTHERN" SCHEME COLLAPSING.

Anti-climax of the "land congress" scheme in the South seems to have been reached in the meeting last month at Jackson, Miss. The most significant resolution adopted by the convention there was the following:

That this immigration convention does hereby respectfully memorialize Congress to pass legislation restricting the present alien influx of ignorant, thriftless and undesirable people now pouring into the United States from Southeastern Europe, Western Asia and other foreign countries, and that we urge upon our Senators and Representatives in Congress to use every possible effort to bring about this desirable legislation and the abolition of the Federal bureau of distribution in order that this objectionable tide may not be diverted to and distributed over the South, and particularly Mississippi.

Equally significant, and by no means unrelated, was the failure of the convention to endorse, as preceding "land congresses" had done, the "Southern Commercial Congress." The resolution passed and the one not adopted mark, it is hoped, the beginning of the end of an attempt, engineered from New York, Washington and Chicago, to use the South in a combination of land speculation, unique personal ambitions and New York slum-cleansing "philanthropy," merely another form of the divers movements which for the past ten years have fooled quite a number of earnest Southerners. The amount of money these Southerners have wasted under the lure of specious advances made to them has been quite a sum. But its loss is as nothing compared with the damage that would have been done to the South had the movements succeeded. The epitaph of this latest scheme is well written by the *Farmers' Union News* of Union City, Ga., as follows:

These movements have been weighed in the balance and found wanting, not only in each Southern State, but in similar affairs, pretending to embrace and represent the entire South. The *MANUFACTURERS' RECORD* of Baltimore editorially, on March 4, 1909, commented at length upon these so-called "Southern" commercial congresses, parliaments, conventions, etc., and said: "We have in our archives complete records of everyone of these attempts made during the

past 10 years. It appears from these records that there is almost something more than mere coincidence in the means adopted and even the language employed in trying to persuade representative Southern men to give them countenance." In speaking of one of these in particular the editor says: "A later gathering, into which an alien element dominantly, but in cloak, entered, was in reality the outcome of a plan originating in Italy to flood the South with Sicilians. The *MANUFACTURERS' RECORD* knows that representative Southerners would be astonished to learn how close they have come in Southern gatherings of various kinds with the witting or unwitting agents of these alien-fostered immigration schemes directed against the South and its best interests."

The *Farmers' Union News* seems to be in a fair way of becoming the intended victim of some promotion of these "Southern" schemes skulking behind supposedly representative citizens of the South in the circulation of libel.

JAPAN AND WAR.

Since the death of Lord Pauncefoot, who administered the foreign affairs of the United States during the last 10 years of his life, England has been somewhat hampered in handling the power of this Government as a bolsterer of her ambitions in the East. The suggestion by way of London that war between Japan and the United States is inevitable indicates that the British Foreign Office is again looking for someone to handle its hot chestnuts. It is, therefore, well to emphasize the fact that every consideration of civilization is against such a war. There are, to be sure, certain crassly material stakes involved, but they concern only a few interests in this country and in England, more or less closely allied, that are responsible for forces of the United States being in the Philippines in lurk against the Asiatic Continent. These interests are the ones that prostitute the sentiment, "My country, right or wrong," into a defense of maladministration of the Government of a country to their selfish advantage. No Western people has ever undertaken to exploit the Orient without suffering in reflex from the moral miasma of the East. Ten years of the United States in the Philippines prove that American civilization is not immune to the curse.

It is unnecessary for the United States to be at war with any other country, however feeble, even constructively, as in the case of Colombia seven years ago. The integrity of the country should suppress even the talk of war; it should set its face against any repetition of any outrage like the unnecessary war against Spain under pretext of intervention in Cuba. When any influence, journalistic or political, undertakes to promote war, the honesty, morality and patriotism of the people should pillory the real inspirers. The people will not go amiss in the next 10 years in crediting such inspiration to the interests that inspired the war against Spain, and they may discover such beneficiaries in discovering the chief beneficiaries of that war at the expense of the blood and treasure of the American people.

CHANCES FOR SOUTHERN BOYS.

Prompt local application to the suggestion in the issue of June 23 of the *MANUFACTURERS' RECORD*, that Southern boys have right at their very doors opportunities for profitable summer employment, is made by the Macon (Ga.) *Telegraph* as follows:

Right here in Georgia the boys in our cities will find no difficulty in making an application of this suggestion to their cases. Thanks to the great and growing peach industry which has been developed in recent

years, boys looking for healthful outdoor work by which they may build up their constitutions and make good pocket money at the same time will find the opportunity ready to hand in the peach-growing belt, where the orchardists are in need of help in the picking, packing and shipping of their fruit to market. The work may be strenuous and not very promising in itself, but it will harden their muscles and render them more fit for other occupations, even if it does not put some of them on the way to fortune. Many of the owners of the rich peach orchards near Macon began the business as farmers a few years ago, and what has been done can be done by the boy or the man who can see and grasp his opportunity.

As the *MANUFACTURERS' RECORD* pointed out, there are divers lines of farming and orcharding in the South calling lustily for sturdy help at this season. The boys who respond to the call cannot fail to reap advantage in health, in experience and in pocket. They must not be deterred by the thought that the work will be hard. A few days will suffice to bring unused muscles into good shape. Nor must they hesitate at the idea of dirtying their clothes or hands. Dirt is only misplaced matter. The mud or dust on one's shoes consequent upon tramping through the fields or the grime on hands and face following a day in the machine shop is not misplaced matter.

We have heard of one lad aspiring to work during the holidays who threw up his new-found job after two days because the work was too hard for him. It is feared, unless he reforms, that his college career will end in his becoming a sociologist or a salaried "philanthropist." He is evidently not destined to become one of the producers of the world.

REUNION RUBBISH.

Reunion of the North and the South has recently been made the subject of a symposium in a Boston periodical having apparently as much vacant space in its pages as it has in what passes for its intellectual organ. This undertaking may have been a sort of premature celebration of the fiftieth anniversary of disunion. If so, it was about as foolish a project as anybody could possibly conceive. If the symposium was based upon a sincere conviction that there is any necessity for any particularly strenuous effort to reunite the North and the South, it indicates that some newborn infant or some Rip Van Winkle is in charge of the Boston periodical.

Reunion of the North and the South and the West is a fact of many years' standing. If the North and South railroads of today had been in operation in the later fifties, disunion would hardly have occurred at all, or, if it had happened, would have been of the East and West, and not of the North and South. For the community of fundamental interests represented in a railroad system linking Boston and New Orleans by steel rails and separating them only by about 40 hours, a community implying that anything affecting materially Georgia or Virginia will find sympathetic reflex in New York or Illinois, and *vice versa*, forbids disunion, and would have forbidden it 50 years ago. There are too many ties of blood, of brains and of business between the North and the South to permit of any reasonable thought of disunion.

Talk about reunion tends directly to carry the mind back to the time of disunion. It may appeal to a few persons here and there too good-natured and too honest to believe that anyone would deliberately play them for suckers, but it may be safely said that, as a general rule, the talk of reunion between the

North and the South, as calculated to revive memories of disunion, has its origin either with professional reunionists who make their living in that way—and there are not a few of them, both in the South as well as in the North—with individuals deliberately planning to cloud elemental principles in preaching "breadth of vision," or with publishers proposing to issue cheap editions of works upon which the copyright has expired and which should have long since passed into the oblivion that they deserve, and in the hysteria thus cultivated to float a lot of new rubbish.

There are too many pressing problems of the day to be solved, for the intelligence of the country to be diverted by reunion rubbish or a revival of the feelings of 50 years ago.

A GREAT CEMENT PLANT.

The United States Steel Corporation indicates its faith in the almost limitless possibilities for the expansion of the cement industry in this country by the official announcement that its subsidiary, the Universal Portland Cement Co., has been authorized to complete at once the construction of cement plant No. 6 at Buffington, Ind., to the general full capacity of 4,000,000 barrels per annum.

In January, 1910, an appropriation was authorized for the construction of the first plan of this plant, having a capacity of 2,000,000 barrels. A decision has now been made to extend this to its full ultimate capacity at this time at a total cost of \$4,500,000. This includes the cost of the power station at Gary, where the electrical power to operate the cement plant will be generated, utilizing the waste gases from the blast furnaces. When the plant is in full operation in May, 1911, it will be the largest single unit manufacturing Portland cement in the world, and with the cement plants No. 3 and No. 4 of the Universal Portland Cement Co., which have been in operation for some years at Buffington, will give a total capacity at that point of 8,000,000 barrels per annum. With the completion of this plant the Universal Company will have, including its present Pittsburg plant, an annual output of 12,000,000 barrels of cement, all manufactured from blast furnace slag and limestone. The development of this plant, based on using slag, to this great extent is but another illustration of the rapid utilization of hitherto waste products. The great expansion of the operations of the Universal Company is especially interesting to the South in the light of numerous reports that have from time to time been published, indicating that when the Tennessee Coal, Iron & Railroad Co., another subsidiary of the Steel Corporation, has carried out some of the improvements now under way in the Birmingham district, the Universal Company will establish a great cement-making plant in that district. While no particulars are available and no time, we believe, has been set for the commencement of such operations, it is well understood that in the future, as a natural outgrowth of the utilization of slag for cement-making, the Universal Company will build a great plant close to the furnaces of the Tennessee Company, and thus add one more great industry to that district.

Under the suggestion in the fact that in so many places in Texas newspaper activity has preceded town development, the Texas Commercial Secretaries' Association is pushing publicity work for the State. It is a pioneer in that particular, and the scope of its work is indicated in its sending regularly its press service to 600 of the 950 periodicals of Texas, and to 400 newspapers in the North and East.

ENID'S SEVENTEEN YEARS.

Type of the Rapid Development of Oklahoma.

[Special Cor. Manufacturers' Record.]
Enid, Okla., July 1.

From a buffalo wallow in 1893 to a magnificent city of 20,000 people in 1910 is a broad jump, but one that Enid, the Queen City of Northern Oklahoma, accomplished through the persevering spirit of its people.

Enid was one of the first cities laid out by the Government before it opened the Cherokee strip for settlement on September 16, 1893, and in two hours from the time the carbines of the soldiers rang out the announcement of the opening about 4000 persons had swarmed over the site and staked out lots.

A week later the population of Enid was about 4000, and a very motley assortment of humanity, but the citizens gradually asserted themselves into an active, vigorous and influential citizenship. By reason of its ideal location, Enid has become one of the foremost cities of both the Territorial and Statehood period.

It was not until 1900 that Enid began surging ahead of some of its sister towns of the Cherokee strip, and that growth is due mainly to the "get-there" spirit of its business people. As everyone knows, the acquisition of new railroads to a new town or city means much for that municipality, and in that year and in the following ones efforts were made successfully to get the Blackwell, Enid & Southwestern, the Enid & Anadarko, Enid & Tonkawa, Denver, Enid & Gulf and the Arkansas Valley & Western, all of which were absorbed by the Frisco, Rock Island and Santa Fe systems. With later extensions of the several roads, Enid wholesalers are given 10 routes to ship their products. The next two years will find two new roads building into Enid and helping to make business conditions better; they are the Enid, Ochiltee & Western from Dalhart, Tex., and the Osage & Western from Bartlesville, in the oil district.

While possessing many of the most attractive homes in the State, and often regarded as the "residence city" of the new State, Enid has many factories and commercial houses which gives it prestige in the business world. Besides that, Enid has 300 drummers residing here.

The years of 1909 and 1910 have seen the city limits extend in various directions and take into the corporate limits a number of new additions and one town, that of East Enid, where the new People's packing plant is being erected by the farmers at a cost of \$1,000,000, and which will handle the stock from the Texas Panhandle and Western Oklahoma, instead of sending it to Wichita and Kansas City markets.

That it pays to advertise is the motto of the Enid Chamber of Commerce, which is ably assisted by the three daily newspapers, the *Eagle*, *Morning News* and *Wave-Democrat*. As a result new factories and other institutions have been secured for the city which could not have been gained had not the city been boosted as it is.

According to C. H. Sexton, city engineer, the last 12 months have seen more building under way and completed in Enid than in any other two years combined, and the construction work is still progressing rapidly. Some of the new buildings erected are the handsome Carnegie Library, costing \$25,000; a new city hall and fire station, costing \$25,000; a new high school, aggregating \$250,000, and three other ward buildings, costing \$20,000 each; the large livestock pavilion, dimensions 150x700 feet and seating 5000; a dozen new business houses, adding considerably to the appearance of the city.

In the ecclesiastical way Enid is very fortunate, having some of the prettiest and sizable churches in the State, among

which are the Christian, Baptist, Methodist, Catholic, Episcopal, Christian Science, Lutheran and others. The estimated value of church property in Enid is \$300,000.

Enid has today the commission form of government.

A population of 20,000 people, 98½ per cent. of which are white.

Not a saloon or joint.

Threelines of railroads, with 10 branches.

A chain of interurban roads building.

Offices and shops of the Western division of the Frisco.

Repair shops for two branches of the Rock Island system.

A monthly payroll to railroad employees of over \$100,000.

A million-dollar packing plant nearing completion.

Thirty other factories of different descriptions.

The Oklahoma Christian University, maintained by the Christian Church, and with an enrollment of 400.

The Loewen Theater, erected at a cost of \$125,000, with a stage used by two individual theaters.

The Garfield county courthouse, erected at a cost of \$150,000.

Enid needs:

New banking institutions, especially a bank and trust company.

New and modern office buildings.

A new hotel, with accommodations for 300 guests.

New wholesale houses.

New factories and warehouses.

New flats.

New people. PAUL S. HEDRICK.

IRON-MAKING AT CHARLESTON.

Enthusiastic View of Conditions for the Industry.

T. M. Waring, president and treasurer Killian Fire-Brick Co., Charleston, S. C., writing to the MANUFACTURERS' RECORD regarding the recent article in our columns by Mr. Charles Catlett of Staunton on "Charleston—An Iron Center," says:

"The matter of placing iron furnaces on the Atlantic coast was mooted 20 years ago when the Cuban ores came into prominence, but presume the unsettled condition of Cuba was a check to investments there.

"However, conditions have changed, and with stable government investments in the Island of Cuba being safe, the iron ore is mined and exported. It is used at Sparrows Point, Md.; at Bethlehem, Pa., and at other points North. Now, if so, why not at Charleston? The freight would be less. The writer has not the figures, but has every reason to believe that the freight from Cuba to Charleston, all by water, is less than the freight the Pennsylvania furnaces pay on the ore from 'Mesaba Range,' which bears railroad freight to Duluth, then lake freight to Ohio port, and then railroad freight to the furnaces.

"As to the ore produced at Charleston from pyrites ore, there are thousands of tons of it—the accumulations of 30 years lying around the fertilizer factories. Some 14 years ago the writer shipped two large cargoes of this ore to Philadelphia, guaranteeing minimum of not less than 2 per cent. of sulphur, to which point the pyrites ore was burnt at his factory for sulphuric acid. The rigid analysis to which the cargoes were subjected at Philadelphia showed up excess sulphur, with the result that the return was too small to repeat the venture, the pyrites ore being burnt for the best return of sulphur fumes, and not for marketable iron.

"However, in the last year or two an ore company has operated amidst the fertilizer factories, and taking this burnt ore, and by process further reducing the residuum of

sulphur, has made a marketable iron ore running 65 per cent. metallic iron.

"Now, then, having the Cuban ore supplemented with the local ore, one foot of the tripod of iron-making is placed. Next the coke. The Carolina, Clinchfield & Ohio Railway will furnish the coal for that under its progressive management from inexhaustible mines of superior coking coal. The second foot of the tripod is placed. Next the limestone for fluxing. In the county of Cherokee, S. C., through which the trains of coal will pass, are limestone quarries analyzing 96 per cent. carbonate of lime. Attach the cars of limestone to the trains of coal and the third foot of the tripod is placed.

"Further, in the making of iron and steel large quantities of fire-brick are used in the coke ovens, furnaces and steel ladles. About 100 miles from Charleston is located the Killian Fire-Brick Co.'s factory, with immense beds of fire-clay of high-grade analysis, and whose products have been used throughout the South in factories of all kinds and satisfactorily in the steel ladles of the Tennessee Coal, Iron & Railroad Co. The conditions, then, are ripe for that era of iron-making at Charleston which your correspondent so ably depicts. Will some Carnegie of the South grasp them and turn the raw material into the finished product?

"The glare of the coke ovens and furnaces on the peninsula of Charleston will at night be seen on the Atlantic Ocean. The mariner will pause, then realize that Charleston has forged to the front; that into her harbor he may bring his deepest-draft ship and load her with iron or coal, cotton or rice, granite or fertilizer.

"The coal will be here within the year, the furnaces and coke ovens should be ready for it. Then greater prosperity to 'The City by the Sea,' and incidentally to all our Southland, which your valuable paper continuously strives to benefit."

Building Activity.

Mr. J. S. Starr, architect, of Rock Hill, S. C., writes to the MANUFACTURERS' RECORD:

"I have awarded the contract to Setzer & Moser of Hickory, N. C., for the Lowryville high school at Lowryville, S. C. The building is to have four classrooms 18x20 feet, a 12-foot hall, four cloakrooms, two rooms divided by rolling partition, metal roof, and with desks and blackboards complete, \$4000. I have just finished a set of plans for J. T. Neely of this city for a 10-room residence with one bathroom; cost \$3500.

"I will ask on July 12 for bids for the enlargement of a first A. R. P. church of this city. The plans call for an addition 44x52 feet, which will contain a room for a pipe organ, five classrooms and a library, etc. This will be a brick veneer job; the roof will be slate, the ceiling of metal, with light brown pressed brick wall, for which I want samples and prices on all materials.

"The building committee of the Friendship Institute (colored) is asking for bids for the new college building to replace one burned. Plans which I have just finished call for a building four stories high, 45x65 feet, of brick, with asbestos, slate and tin roof. The building is to contain auditorium, classrooms and bed chambers, and is to cost about \$18,000."

Georgia Expenditures.

During the past year \$2,506,980 were spent upon road improvement in Georgia. The road mileage of the State is 82,182, of which 4533 miles have been surfaced with stone, shell, gravel or sand clay. Fulton county leads, with 325 miles of improved highways.

NATURAL GAS FIELD NEAR FAYETTE, ALA.

By DR. DAVID T. DAY of the U. S. Geological Survey.

[Written for the Manufacturers' Record by permission of the Director of the U. S. Geological Survey.]

More than a year ago, in prospecting for coal three miles east of Fayette, in Fayette county, Alabama, traces of petroleum were noticed by Mr. S. A. Hobson, a geologist of Birmingham and brother of Representative Richmond P. Hobson of Alabama. The interest which Mr. Hobson aroused in the oil prospects resulted in the formation of the Providence Oil Company, which at once proceeded to drill for oil.

The region comprises the west side of the Warrior coal field in Western Alabama. The eastern edge of this coal field is much disturbed by folding and faulting, but this is less noticeable to the west, where the gas is found. The strata seem to dip to the southwest with gentle undulations from northwest to southeast. Just before reaching the field they dip under a cover of Cretaceous, so-called, Tuscaloosa drift. This makes the study of the structure rather difficult. The drill passed through a succession of shales, sticky clays and porous sandstones, with occasional coal beds, and here and there slight showings of petroleum in the sands. Occasional pockets of natural gas were encountered, until at 1400 feet a sandstone yielded a large supply of natural gas.

Three other wells in the same neighborhood gave a similar gas sand at about the same depth, and nine more wells have been started. Only portable rigs were used at first, and surprisingly good results were obtained with them. They are of the Advance, Independence and Keystone types.

The work has all been done under the supervision of Dr. G. B. Crowe, president of the Providence Oil & Gas Company, who has had much experience in drilling for coal.

A log of one of the wells is given below to show the characteristic features of the sands and shales passed through. Dr. Crowe opened the gate valve on one of the large wells and the flow of gas was sufficient to justify his statement that a pressure gauge showed 630 pounds closed pressure, and that if the gate valve is opened full until the pressure is reduced to 20 pounds, and then is closed again, the pressure will reach 300 pounds in 80 seconds and 600 pounds in 6 minutes. An analysis of the gas by the Tennessee Coal, Iron & Railway Company shows it to be the usual natural gas of the Appalachian region, consisting of over 93.5 methane, with no sulphur. The gas has a very perceptible odor of crude petroleum, like Appalachian, paraffin base, oil. The company has established a good camp for the well-drilling force and is extending its operations rapidly. Two standard rigs are now drilling in addition to the portable rigs, and every effort is being made to determine whether the supply of gas will be sufficient for supplying the City of Birmingham. This means probably nearly a million feet (present consumption) for domestic use, and fifteen to twenty million for manufacturing purposes, with the prospect of great expansion in the near future if natural gas is introduced. There is scarcely an industry, except blast furnaces, where natural gas will not be a material benefit, both in facilitating the work, often improving the quality of the product, especially in glass products, and always lowering the fuel cost. A franchise has been secured at about 45 cents per thousand feet for domestic purposes and half this for industrial use.

The four wells thus far successfully completed and capped probably have a combined capacity of not less than 5,000,000 cubic feet per day, which could be de-

livered to Birmingham through 80 miles of 6-inch pipe, though a larger pipe (12-inch) would be required for the total needs of the city.

The Central Oil Company of Alabama has also begun drilling with a Keystone portable rig a few miles east of the Providence Company, and prospecting is about to begin at Bankston, still farther to the east.

Thirty miles northeast of Fayette seepages of asphalt have been known for years, and a company is being formed for drilling in that neighborhood. The extent of the field is entirely a matter of guesswork as yet. The eastern edge of the Warrior field is too faulted and fissured to hold an oil or gas supply, but these disturbances decrease towards the west and probably die out altogether before the oil and gas region is reached. It is probable that the field will be defined by a series of small undulations in the stratification crossing the chief anticlinal ridges at a sharp angle. It will require careful, detailed, geologic study to work out the structure of the region, and that is the next essential step, and it should at once be undertaken by the State Geological Survey under the competent direction of Dr. Eugene A. Smith, State geologist of Tuscaloosa. This study can be profitably made with a moderate amount of field work in addition to the data at hand, which includes the results of much skilled prospecting for coal in the region concerned. This should give a good clue to the location of subordinate anticlinal ridges, which seem to be of the utmost importance for the local accumulation of oil and gas in this neighborhood.

In regard to oil, there is every indication that it will be found on the flanks of the anticlines. Following is the log of well No. 1:

LOG OF WELL No. 1.

	Feet.
1. Soil.....	6
2. Pink ochre shading into yellow-streaked, dark, gritty clay, inconsolidated silt.....	8
3. Grayish shale.....	41
4. Dark, fine-grained micaceous sandstone; very porous and bearing some water for first few feet; then growing more impervious until the last 10 feet, which became shaly and coarser grain, showing very strong stream of fresh water.....	55
	110
5. Very fine-grained shaly sandstone.....	6
6. No. 5 shading into irregular alternations of shaly sandstone, semi-arg. shale and arg. shale.....	79
7. Fine-grained sandstone slightly saturated with petroleum.....	5
	200
8. Gas, coal and slight saturation—some sandstone.....	5
For next 40 feet saturation continued, growing stronger, and much flowed down ditch upon balling, but could never get flow from walls into hole. This sandstone continued with decreasing saturation to.....	331
9. Semi-arg. shale and arg. shale, and shaly sandstone arg. shale.....	80
	456
10. Shaly sandstone.....	15
	471
11. Coal and fire-clay.....	5
12. Irregular alternations arg. shale and semi-arg. shale and shaly, also ledgy sandstone.....	274
	725
13. Shaly sandstone.....	25
14. Massive fine-grained, dark sandstone	10
15. Semi-arg. shale and shaly sandstone	28
16. Purplish sandstone (chocolate) seemingly very strongly saturated with petroleum.....	57
17. Irregular alternations of shaly sandstone, with some arg. shale.....	55
	910

18. Light-gray sandstone seemingly considerably saturated with petroleum.....	30
19. Shaly sandstone, with occasional streaks of arg. shale.....	60
20. Arg. shale.....	45
	1045
21. Light colored, massive sandstone; about 50 feet of sand, making strongest show of oil yet seen in the field.....	57
22. Coarse, whitish, fine-grained shaly sandstone, with occasional streaks of arg. shale and semi-arg. shale.....	33
23. Dark and growing lighter, and giving very strong odor of oil.....	50

24. Irregular alternations of arg. shale, semi-arg. shale, shaly sandstone and ledgy sandstone.....	213
	1425
25. Sandstone, with quite a showing of oil.....	95
26. Arg. shale.....	20
27. White, very fine-grained, extremely hard sandstone.....	35
28. This sandstone grew dark for about 200 feet, then became white, though coarser grain, showing salt water at about 250 feet April 1; still it is amazingly thick sandstone this 9th day of April, 1910.	

TO DEVELOP TRUCKING AROUND BIRMINGHAM.

[Special Correspondence Manufacturers' Record.]

Birmingham, Ala., June 25.

The Chamber of Commerce of Birmingham is planning a campaign of education along the line of truck farming in the Birmingham district that is broad and sweeping in its nature. A land department has been added to the departmental work of this active body, with Mr. J. H. Adams as its chairman. Large quantities of literature are being distributed in different parts of this country, as well as Germany, Sweden, France and England, setting forth the advantages of this region to the truck gardener.

Eighty-five per cent. of the produce, vegetables and poultry used in the Birmingham district today is shipped in from other sections of the neighboring country. There are thousands of acres of fertile and productive land in this immediate section that are well-nigh going to waste today for lack of attention, and nowhere in the South is there a more inviting field for activity of this kind than right here in the Birmingham district. According to the Government's soil survey reports on this section of Alabama, practically everything in the farm products line can be as successfully grown here as elsewhere. And, in addition to these products, conditions and facilities are equally as good for the raising of fowls, marketing of eggs, etc. To give some idea of the sparsely-settled area, in the way of truck farms, in this section, it would be conservative to say that probably 100 would cover the number of truck farms in and immediately near this district, whereas there are room and need for 1000. The market is strong and active the year round, and, including farm, dairy products and poultry, represents a business amounting to at least \$5,000,000 annually. On the basis of 1000 truck farms, it is easy to see that there is in sight \$5000 gross per capita annually. Taking for granted that it requires 25 to 30 per cent. to do business, a clear profit of from \$3200 to \$3500 per capita is not an unreasonable supposition. These are long figures, but serve to show that more than a comfortable living is in sight for the industrious truck gardener, even with a good-sized dependent family, who should cast his lot in the Birmingham district. There is not a time the year round that the farmer cannot get 60 cents per bushel for all the Irish potatoes that he can produce, 65 to 70 cents for sweet potatoes, 20 to 25 cents per dozen for eggs, and 12 to 15 cents per pound for chickens, to say nothing of the enormous profits on vegetables, spring chickens and turkeys in their respective seasons. Other products of the farm will range in price proportionately to the above-named articles.

This movement on the part of the Chamber of Commerce is wholly an unselfish as well as an unprofitable one to the individuals of the organization. Its purpose is solely to benefit the district by endeavoring to fill this long-felt need. These business men, who have banded together and are willing to sacrifice their own personal

valuable time to this movement in the interest of the Chamber of Commerce, have impressed this question so strongly upon the minds of the heads of the different corporations of the district that quite a few of them have agreed to lease, at very low rates, certain parcels of their land to be used as truck farms. Some have agreed to sell certain portions on a fair and reasonable basis in order to stimulate interest and crystallize sentiment in favor of truck farming on a large and profitable basis in our midst. It is estimated that the effect of such a policy will be twofold. In the first instance, it will bring to the district good reliable and thrifty natives from different sections of this country, as well as foreigners, who will be willing to till the soil and furnish food products for the thousands of laborers in the district. In the second place, there are always members of every family (and friends who can be influenced by them) who do not care to work on farms. These will naturally seek employment at our industrial plants, and thereby assist in populating the district with men whose families are near them, and whose interests are at home. Then, again, it is not at all improbable that there would be an influx of good industrious women who would be anxious to earn a livelihood by helping out in our homes, thereby materially improving the efficiency and standard of home hire. In connection with making provision for its employees, in the way of lower cost of living, probably the Tennessee Coal, Iron & Railroad Co. has accomplished most. Certainly more than any other company in the district. Today it has a large experimental truck farm near McAdory, Ala., and has made complete soil surveys and tests to see what can be produced advantageously. No doubt its ultimate intention is to establish these farms reasonably near its different operations in the State. The farm products will be sold to the employees through the company's commissaries at a very low cost compared with the same class of goods that are being shipped in here. Just what the Tennessee company is now doing the Chamber of Commerce is seeking to supplement for the benefit of the employees of other substantial mining and furnace companies of the district that are not so fortunately situated as the Tennessee company. In order to do this, good reliable truck gardeners must be induced to come to this section and engage in the production of food products for the employees of the mining and hundreds of other industrial camps in the Birmingham district.

Y. A. DYER.

\$3,000,000 THE ANNUAL STAKE.

Comprehensive Statement from the Farm Movement Director.

Chamber of Commerce,

Birmingham, Ala., June 30.

Editor Manufacturers' Record:

In the immediate neighborhood of Birmingham we have about 40,000 acres of vacant lands, the bulk of which is owned

by the industrial corporations. Upon these lands, according to the United States soil survey of Jefferson county, vegetables and fruits could be profitably raised.

Within 20 miles of Birmingham we have 200,000 acres more, most of which could also, with careful tillage, the use of manure and the proper methods of farming, be utilized advantageously for truck farming and orcharding.

On the other hand, \$3,000,000 worth of vegetables, poultry and eggs are shipped into the Birmingham district annually from other States and consumed by its people.

The Chamber of Commerce in starting the movement to induce a good class of practical, thrifty white farmers from the East, North and West to settle in the Birmingham district and Jefferson county has two immediate objects in view—to reduce the high cost of living and to relieve in time the condition of the scarcity of efficient white labor in the Birmingham district.

In regard to the latter there is no other way to get a permanent good class of white labor than to get the same through the settler and homeseeker. Nowhere has it ever been possible to bring the laborer first with any kind of success. The history of all successful immigration movements shows that the settler and homeseeker came first, and that when a considerable number of them had been placed their friends and relatives followed and constituted the laboring class.

More than that, a certain percentage of settlers themselves, that is, members of their families, become at once an addition to labor, since often the whole family is not needed to cultivate the land. Even the man who comes to any district for the sole purpose of seeking work there must come with his family and must be a settler and homeseeker to be of any permanent good. The great iron and coal industries here have spent thousands of dollars for transportation of laborers shipped to them from time to time from New York and other points. A good many of them were foreigners of the lower type, who could not be looked upon as a permanent or valuable acquisition to our laboring class, or as a factor in the industrial and agricultural development of our district.

Most of the laborers brought in that way do not stay long enough to become citizens; in fact, a good many of them do not remain long enough to repay for their transportation.

It is but natural, therefore, that the great industrial concerns in our district have pledged their aid, financial and otherwise, to this movement. In regard to the lands owned by them, they promise to lease them to settlers for periods of 5 and 10 years at a reasonably low price (from \$1 to \$5 per acre); to build houses for each family, furnish wire for fencing and do anything else deemed necessary to help the settlers along. And why should they not be willing to do so? Settlers will improve their lands and make them more valuable. They will increase the laboring element, and by raising foodstuffs near the plants and mines the laborers already there and those who are coming will be able to buy cheaper and better food and remain where perhaps they would not otherwise.

The plan we will follow to obtain the desired results is briefly thus: We will first insert small advertisements in a number of agricultural and other papers throughout the East, North and West calling attention to the possibilities of truck farming, orcharding, poultry and stock raising in the Birmingham district, laying stress on the fact that Birmingham alone consumes \$3,000,000 worth of foodstuffs annually. This most likely will bring us many inquiries for further information and literature. We shall also gather thou-

sands of bona fide addresses from other sources. In the meantime we are preparing a 32 or 40-page magazine richly illustrated, describing the agricultural and industrial resources of our district and county, its climate, people, etc., which we will distribute in large numbers throughout the East, North and West (by mailing each copy separately under cover to an address). The inquiries and correspondence will be followed up by personal solicitation; that is, after a great amount of literature has been distributed the writer will commence to make trips to the various States from which replies have been received and endeavor to get in personal touch with each correspondent.

This literature will be issued in English and German, as we are especially anxious to get a good class of Germans to come here. To enable us to carry on this work for a probable period of five years we are collecting a fund from our industrial and business men, all of whom have enthusiastically promised us their support in this undertaking.

Neither do we consider our work done with the arrival of settlers and homeseekers in our district. We will take care of them and see to it that they are placed advantageously according to their wants and needs and in accordance with the promises made to us in writing by the various corporations and landowners. In the course of time we may evolve other plans in pursuance of this policy. For instance, we may take options on lands which are for sale or for lease and locate settlers directly through ourselves. In any case the settlers and homeseekers will have the assurance that every promise made to them personally or through our literature will be carried out, since the Chamber of Commerce assumes the entire responsibility.

We believe that with this plan we will be able to accomplish much good. Many causes have been ascribed to the fact that notwithstanding her immense agricultural and industrial resources, the greatest in this country, the South has not succeeded so far in attracting many settlers. When all is said, however, one cause stands out pre-eminent—the South has never made any strong, systematic effort to increase her agricultural population. The principle involved in this matter is not any different from that underlying any business proposition. If we want settlers we must go after them. That is the whole matter in a nutshell, stripped of all the time-worn arguments about why we cannot get settlers to come South, when, for instance, thousands of good farmers have immigrated to Canada during recent years—and that is what the farm movement of the Chamber of Commerce means—we will go after them and we will get them, too. Nor do we need to go for them to Europe or to the ports of this country. There are many families of German and English-speaking people all over this country who have accumulated a little money and are looking for better opportunities. They are much better adapted to become settlers than the newly-arrived immigrants. In the first place, the average immigrant has but very little money with him. In the second place, he is restless. No matter how good an opportunity he will get, he has an idea in his mind that somewhere there might be a better one. He has to go through the "mill" first before he will settle down somewhere and stick it out. Much more, of course, could be said upon this matter; too much to put into a letter.

S. HECHINGER,

Secretary Farm Movement Department.

The Engineering Experiment Station of the University of Illinois has just issued Bulletin No. 41, dealing with tests of timber beams by Arthur N. Talbott.

DRAINAGE VS. IRRIGATION.

Irrigated lands are reclaimed lands—reclaimed from desert conditions. Drained lands are reclaimed lands—reclaimed from swampy conditions. Swampy conditions are found on mountain tops as well as at sea level. Where there is rainfall and shallow basins without outlet, there are swamps. The only difference between a lake and a swamp is the depth of water. If the water is too deep to permit vegetation to grow, it is a lake.

Hundreds of lakes in the United States are drying up, some from seepage, many from change of feeding streams. They first become swamps filled with rank vegetation, which grows and decays with the seasons. In time they become dry lakes.

Geologists and scientific students are assiduously studying the rapidly-increasing operation of drying up of streams and lakes and swamps.

This makes irrigation more necessary and more hazardous. Hundreds of miles of ditches once amply fed with water are today hopelessly dry, and the thousands of acres they watered have not a modicum of usefulness. The natural drainage of uneven lands is easy, but unreliable. The artificial drainage of level lands is more expensive, but entirely reliable. Only the excess of water is removed, and drainage is at the will of the agriculturist.

The level swampy lands are richer in plant foods than the desert lands—abundantly richer in nitrogen, which is the plant food most expensive and most difficult to add to soils. The decayed organic matter has made the swamp lands beds of nitrogen. They are the lands richest in humus.

The initial cost of artificial drainage is nowhere more expensive than the initial cost of irrigation. In Louisiana, where exists the largest area of land which, owing to its level condition, excess of water must be removed by pumps, it has been found that the cost is much less than the cost of water to the irrigated lands. It is easier and less costly to take the water off the land in Louisiana than it is to put water on the land in the irrigation States.

New Orleans is the most striking example of artificial drainage, simple, effective and cheap in the United States, perhaps in the world. The rich, productive sugar plantations are as interesting examples of individual artificial drainage as New Orleans is of the municipal operation. The superior advantages of artificial drainage are fully demonstrated.

Lakes are never charged with causing bad health, but the swamp has suffered through all times from the fancy of fiction writers—beautiful lakes and dismal swamps. Elevation is not one of the conditions of healthfulness. The mountain top is not more healthful than the seashore. All the unhealthy and unpleasant conditions of swamps are entirely removed by drainage. The splendid sugar plantations are more beautiful than the farms of the famed Mohawk Valley, and the health of the planters is as good as farmers in any country. They are citizens of the highest class.

O. W. CRAWFORD.

New Orleans.

The Mobile Portland Cement Plant.

The Mobile Portland Cement & Coal Co., Van Antwerp Building, Mobile, Ala., reports that it has begun the construction of its plant. It writes as follows:

"On the 25th of June the first barge-load of machinery and equipment for the construction of our cement plant at St. Stephens, Ala., was loaded and went up the river on that night, and on the 29th actual construction work began.

"O. Gerlach, Ph.D., is the general manager of construction and operation. Pur-

chases will be made through the Mobile office, and work will be pushed rapidly. The capacity will be 3000 barrels per day. The buildings will be of structural steel, with, in all probability, corrugated iron sides and roof. The spur track on the railroad will be under construction in the next 10 days, and equipment will go to the plant both by rail and by water. Coal will be supplied to the plant from the company's own coal property in Tuscaloosa county."

Foreigners in Louisiana.

Mr. J. L. Knoepfer of the State immigration office has recently made an interesting statement as to colonies of foreigners in Louisiana. Twenty-five years ago four Belgian families settled near Alexandria and engaged in truck farming. The colony now numbers 80 families. There are four German colonies, one of 400 families at St. Leo, one of 40 families near Clinton, one of 75 families near Ponchartroula and one of 40 families at Covington. About 12 years ago two Hungarian families settled near Hammond, and last year the colony of 60 families shipped 50 carloads of strawberries, besides beans and other truck. There are scattered groups of Hollanders, Servians and Croatians in the State. All of these foreigners are successful in agriculture, and the colonies have grown largely as a result of the experience of the original newcomers.

To Make Portable Band-Saw Mills.

The American Portable Band-Saw Mill Co. (which was incorporated last week) will engage in the manufacture of sawmills and sawmill supplies, controlling the patents of B. F. Watkins, president of the company, and Gordon Bryan, both of Winston-Salem, N. C. This company is capitalized at \$1,000,000, and for the present will contract with manufacturers to make its mills. Correspondence is invited, and Mr. Watkins can be addressed at Winston-Salem, although the main office of the company will be at Greensboro, N. C.

Houston Progressiveness.

Mayor H. P. Rice of Houston, Tex., in his annual message, which has just been published, together with reports of other city officials, takes just pride in pointing to the investment in 1909 of more than \$1,500,000 in schoolhouses, streets, sewers, firehouses, water mains, conduits, wharves and slips, and to the recognition by the National Government of the importance of the city's waterway by the appropriation of \$1,250,000 to match a like amount given by the people of the city.

Fertilizer Mixers' Officers.

At the annual meeting of the Fertilizer Mixers' Association of Georgia at Atlanta last week the following officers were elected: President, Isaac Schoen, Atlanta; vice-president, J. L. Hand, Pelham; secretary, A. D. Strohbar, Savannah; treasurer, J. A. Pittard, Winterville. Members of the association reported that trade has been unusually good this year, and that a large increase in fertilizer sales is expected.

Clock Factory Equipment.

R. K. Duhar, Gheekanta, Limda PoKle, Baroda, India, writes the MANUFACTURERS' RECORD:

"I beg to inform you that I wish to open a clock factory here, and so will you be good enough to get me a complete plant for manufacturing about 125 clocks per day. If it is necessary I hope you will kindly publish a notice in your valuable MANUFACTURERS' RECORD and oblige me."

TEXAS AND LOUISIANA CROP PROSPECTS FINE.

[Special Correspondence Manufacturers' Record.]

New Orleans, La., June 30.

Never in the history of the country has there been a finer outlook for magnificent crops of all kinds than is found throughout Texas and Louisiana generally today. As a result of a recent trip through Southwestern Louisiana and into Texas I discovered a really remarkable situation. While Texas produced in some parts a fine crop of cotton last year, and raised a good crop of wheat, corn and rice and an increased crop of sugar-cane, and the Laredo district had its ordinary crop of Bermuda onions, yet a very spotted condition prevailed owing to the floods in some sections and droughts in others. The very fertile district of Northeast Texas had one of the most disastrous droughts ever known in the history of the State, and this following the seven years of insufficient rainfall brought about a condition which, in a less fertile State, would have more than wrought disaster to the section. There was nothing like bankruptcy, however, although the people of Northeast Texas failed in the prosperity which their rich soil caused them to certainly expect. This year, however, every part of Texas seems to be in an ideal condition. The northeast has never looked finer, and throughout the length and breadth of this vast empire the outlook for every kind of a crop has never been more excellent. Rains have been abundant everywhere, and there is no spot drought-stricken. There have been no disastrous floods, and no untoward conditions at any place outside of some little temporary damage done by the late spring frosts. Wherever necessary, replanting of corn and cotton was done, although most of the damage caused by the spring frosts was nothing like as great as feared at the time of its occurrence.

There was a fine onion crop in the Laredo district, which has been marketed, with returns of somewhere between \$1,500,000 and \$2,000,000. The cotton crop is so promising throughout Texas that predictions of a bumper crop are being heard in some quarters, and it seems reasonable to expect that at least a 3,000,000-bale production will be gathered. There is a big increase in the acreage of corn, and the prospects are that the yield this year will be more than 250,000,000 bushels, as against 117,000,000 for last year. The wheat crop, already harvested, had excellent weather conditions right through the harvest, and the oats crop will show a greater yield in the aggregate and in the average yield per acre than has ever before been known. Conditions affecting the rice crop are also very fine, and the yield promises to be greater than normal. Up in the northeastern counties, where are produced the best peaches and tomatoes the Northern markets know, there has been an enormous yield this year. During the past week the shipments from that section have averaged 75 cars of fruit and vegetables daily—mainly peaches and tomatoes.

While it seems that Texas has practically conquered the boll-weevil, the cotton planters of Louisiana are yet feeling the effects of this pest's ravages. The cotton crop of Louisiana will not be anywhere near the normal this year, but to offset the disadvantages of this condition there is a great diversification in farm products and an enormous increase in the corn crop. There were about 52,000,000 bushels of corn raised last year in Louisiana. This year there is a much greater acreage and a much better outlook.

Owing to the fact that Louisiana corn matures earlier and is thoroughly dried out

before Northern corn is in condition for shipment, it was the expectation last year that an export business in corn would be built up in New Orleans. However, after engagements had been made by local corn dealers, the local demands of Texas and Arkansas became so great and the prices offered so much more profit in the transaction that corn raisers disposed of their surplus to the States to the west and north of Louisiana, with the result that a merely insignificant quantity—less than 100,000 bushels of Louisiana corn—was available for export. With the corn crops of Arkansas, Texas and Oklahoma in so much more promising condition than last year, and with the enormous yields indicated in Kansas, Iowa, Nebraska and Illinois, it is possible that this year Louisiana will be able to export a considerable quantity of its surplus corn, although, of course, anything like definite prognostications as to crop movements may not be made with confidence this early in the year.

The cane crop of Louisiana never has looked more promising. There has been a sufficient rainfall, in the form of frequent showers, throughout the past four or five weeks, and although in certain spots there had been a phenomenal lack of rain previously, the precipitation since that time has been ample and timely, so that the prospect for a fine yield has never been better at this time of year.

Along the Illinois Central, extending from Hammond, La., well up toward Jackson, Miss., is a great fruit, truck and dairy district, the development of which has been fostered by the Illinois Central management. A striking illustration of how well the work has been done is afforded by the fact that during the strawberry season this spring there were deposits of \$1,000,000 in the banks of Independence, La., the headquarters of the Fruit Growers' Association, as a result of proceeds from the sale of strawberries raised in that district.

Because of present conditions, backed by the prosperity which never wholly fails, this southwestern coast country, augmented, unquestionably, by the advent of Northern men and outside money, there is a material development going on all over this section of really remarkable proportions. Over at Dallas I found a regular building boom under way. In addition to the magnificent skyscrapers and other buildings which have been completed there in recent years, there is a definite purpose to erect a number of other notable buildings in the immediate future. Butler Bros. of New York, St. Louis and elsewhere are about to construct an eight-story building, to cover an entire city block, which will cost a couple of million dollars or so. The Busch interests of St. Louis, who own the Oriental Hotel, have bought a large tract of land on the block diagonally opposite, where the old city hall was located, and propose to put a million-dollar addition on the site purchased. It will be connected by a tunnel in the manner of the Auditorium and Auditorium annex, Chicago.

The Southland Life Insurance Co. has decided to erect a 10-story office building, to cost about \$300,000. A 20-story office building is also spoken of as a certainty, and the city will have to provide a new city hall to take the place of the property purchased by the Busch syndicate.

In addition to these, which are only the most significant of the buildings proposed for Dallas, there are other interurban electric lines of railway proposed.

Houston already looks like a city of skyscrapers, and it appears that the modern development has only just begun. There

are several new bank buildings under construction, some new hotel buildings, including probably an entirely new structure on the site of the historical Rice Hotel, and the office building for the Southern Pacific Railroad that will cost on toward a million dollars.

The trustees of the William M. Rice estate have, after years of investigation, perfected their plans for the initial construction of buildings for the William M. Rice Institute. The endowment of this institute amounts to more than \$7,000,000, and buildings to cost about \$2,000,000 are contemplated in the immediate plans of the trustees.

At Galveston the most important project at present under way is the two-mile causeway, connecting the island of Galveston with the main land. All the details have been perfected, and the concrete work is well under way. It is expected that this concrete causeway will be completed on contract time, in which event it will be open for traffic before the close of the present year. It provides a double track for steam railway facilities, separate interurban trolley tracks, a wagon road and foot passageway. The effect of this improvement on Galveston and the entire country between Galveston and Houston will be incalculably beneficial, and already has proven a stimulus in the way of attracting town promoters, truck farmers and others to the territory between Houston and Galveston.

It is the expectation that Galveston will become a veritable Mecca for pleasure-seekers during the summer months, and that not only automobile parties from Houston, but residents from the up-country, as far away as Colorado and Oklahoma, will be attracted by the delights of Galveston's bathing beach, which is unquestionably without a peer, between the Mexican border and Cape May, N. J. In anticipation of the advent of visitors, the people of Galveston are arranging for the construction of a beach hotel, which will be modern in every detail, picturesque in outline, and more than comfortable in appointment. The building will cost \$750,000, and it is intended to have it completed by next spring.

There are railroad terminal developments under way, including a two-million expenditure by the Rock Island Railroad, and in all the country round about there are plans for developments of a most notable character.

Authoritative announcement has not yet been made of the proposed development at Port Bolivar, across the bay from Galveston, but reports which have already appeared in the newspapers to the effect that great plans are in contemplation for the upbuilding of a commercial port at Bolivar Point are believed to be not far aside the mark. It has been established that Chas. M. Schwab and other Northern capitalists of large importance and broad vision have secured holdings of immense iron-ore tracts in Northeast Texas, and that plans are being perfected to ship this ore via the Santa Fe lines to Bolivar Point. Here it will either be loaded on ships or smelted, as developments may indicate the best plan.

At Texas City the far-reaching plans for a terminal port which have been worked out by Capt. A. B. Wolvin of Duluth are being rapidly developed along lines which aim to give to Texas City the advantage of cheaper handling costs than can be boasted by any other port in the South.

In New Orleans there is activity of various kinds, including the construction of new buildings and the perfection of plans for the drainage of wet lands in the immediate vicinity of the city, in which outside capital is almost wholly employed.

New Orleans and Louisiana are apparently attracting the attention of outsiders in a more serious way than has been the case heretofore, and it would appear that capitalists of large caliber are giving more attention to commercial conditions here than they have ever done before. The agitation of the people of this section for the designation by Congress of New Orleans as the place for the holding of an exposition in celebration of the completion of the Panama Canal is attracting the attention of outsiders to New Orleans, and in this connection the effort of Mr. James W. Porch to found an American line of boats to run between New Orleans and the Pacific Ocean ports is a measure attracting much local attention and possessing such strong features in its favor as must bring it to the attention of shippers and transportation experts and statesmen of nation-wide horizon.

Taken altogether, the southwest coast country is developing along lines which ought of necessity to make this section loom large in the public eye henceforth for a long time to come.

ALBERT PHENIX.

Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., July 4.

The pig-iron market situation the past week has been comparatively quiet. There were fewer sales made than the week previous, and inquiries did not hold up nearly so well. Both are accounted for to a great extent by the recurrence of freight-rate agitation and the slump in the stock market. There were only about 7000 tons of pig-iron sold all told, and including the business transacted by the different furnace interests and iron merchants. Talk is rather free in regard to \$11.50 iron, but it is a hard matter to "run down" sales promiscuously made by anything like a majority of producing interests. As far as sales of warrant iron go, of course, that is a matter that does not even enter into the situation, for the bulk of it was bought at a price ranging from \$11 to \$11.50 per ton at the furnace practically a year ago. Two more stacks in the district are out of the market as far as their product goes. This only leaves about 12 stacks in blast on foundry iron, producing something like 70,000 tons per month. This curtailment in production is enabling the companies to work off at a rapid rate the accumulated stock. Southern charcoal iron is quoted at \$22 to \$22.50 per ton at the furnace.

Continued buying in small lots is reported by the manufacturers of water pipe. No large lettings are reported, as having come up for consideration during the past week. Prices have not changed since last report, and are as follows per net ton f. o. b. cars here: Four-inch, \$23; 6, 8 and 10-inch, \$21; 12-inch and over, average of \$20, with \$1 per ton extra for gaspipe.

The scrap-iron market is absolutely featureless, and there is little, if anything, that can be said as to its immediate future in the way of improvement. No improvement is looked for until there shall have been a decided turn in the pig-iron market. Nominal prices continue to be quoted.

Plans and agreements have been consummated whereby a five-story concrete and brick building, with basement, will be erected on the southeast corner of Second avenue and 20th street at a cost of \$100,000, to be occupied by a department store, which will contain 15,000 square feet of space. The frontage will be 75x125 feet. In order to make room for this building, it will mean the demolition of six old landmarks of Birmingham located in the heart of the city. Actual work on the building will not start before April or May of next year.

Birmingham has scored another victory

in the line of acquiring another finished-product plant. It will be known as the Birmingham Valve & Fittings Co., and when completed will melt about 25 tons of pig-iron per day, as well as something like three tons of brass. A half-million-dollar plant will be located at East Birmingham, work on same to begin within the next week or so. It is learned on good authority that the existence of the company is due to the merging of the Howe

Manufacturing Co. of Louisville, Ky., and the Stockham Pipe & Fittings Co. of this city. W. H. Stockham of Birmingham is president; C. C. McClarty of Louisville, vice-president; James Weisel of Birmingham, treasurer. Prominent Birmingham citizens, as well as Mr. Jephtha Howe of Cincinnati, are on the board of directors. The product of a plant of this kind has a wide field in the Birmingham district and

the South, as well as all parts of the country.

Furnaces Blown Out.

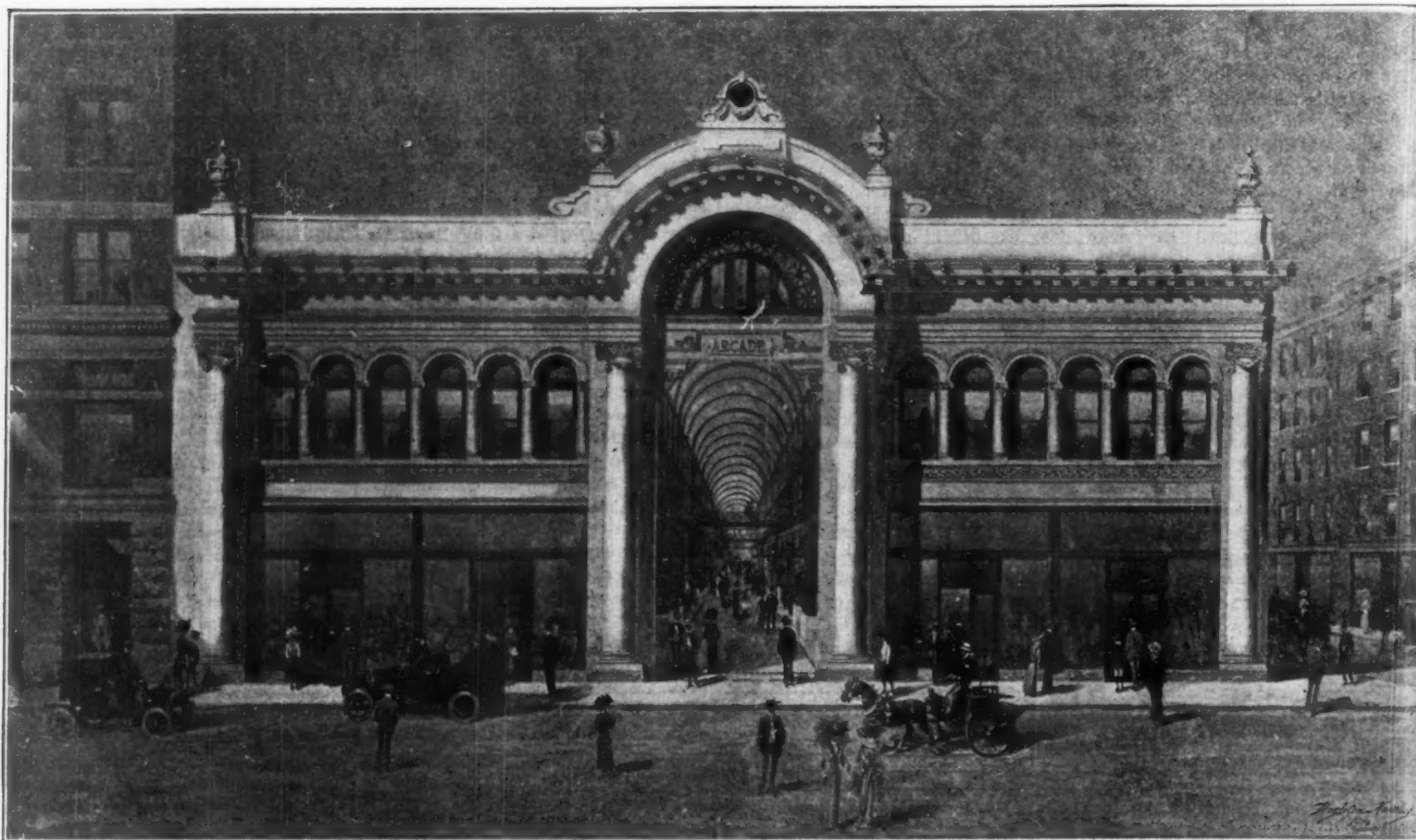
[Special Dispatch to Manufacturers' Record.]
Birmingham, Ala., July 5.

Southern Steel has blown out its Alabama City furnace; also Sloss put out another furnace in city. This makes only 11 furnaces in Alabama on foundry iron, producing at rate of 55,000 to 60,000 tons per month.

Assessed values of property in South Carolina for 1910 aggregate \$500,208,858, of which \$136,438,358 represent real estate, \$271,106,302 railroad property and \$92,664,198 personal property. These figures are to be considered still by the State Board of Equalization.

The eighty-ninth meeting of the National Association of Cotton Manufacturers will be held on September 21 and 22 at Narragansett Pier, Rhode Island.

VIEW OF ARCADE BUILDING TO BE ERECTED AT ATLANTA.



The Manufacturers' Record, Baltimore, Md.:

Atlanta, Ga., June 28.

Gentlemen—Your letter of June 20, asking information pertaining to the erection of an arcade building to be constructed by the Realty Building and Improvement Co. of Atlanta, received.

The arcade will have a frontage of 90 feet on Peachtree street, where Peachtree and four other streets converge. It will be 406 feet long, extending all the way through to Ivy street.

Under the one roof on the first and second floors will be 70 small stores, ranging in size from 19x24 feet to 19x35 feet, and will have mezzanine floors, which will give floor space to each of said stores 19x55 feet.

The building will be supplied with a rathskeller 87x90 feet, and will have a moving picture theater on the first floor and a roof garden and vaudeville theater on the roof. You will observe that the lot comprises nearly an acre of ground, and the garden and vaudeville will occupy the entire roof.

The two-story picture of the front elevation herewith enclosed is as the company first contemplated erecting. The company has not fully decided how many stories it will be built, but is now having plans for 10 stories prepared.

Notwithstanding the fact that the company does not expect to begin the erection for 30 days, it is having many calls for floor space, and all the first two floors could readily be rented at once were the building completed.

This is due to the progressive spirit of the Atlanta people.

It is entirely due to your paper that the Realty Building & Improvement Co., which is composed entirely of stockholders from Richmond, Va., has decided to build the arcade.

I have also obtained valuable information through the MANUFACTURERS' RECORD during the past five years about Jacksonville, Fla.; Wilmington, N. C.; Greensboro, N. C.; Dallas, Tex.; Macon, Ga., and a number of other cities, and I will say that in each instance the information obtained through your columns has been the direct cause which led to my company's making investments in these and other cities.

If the Southern States would advertise extensively their resources through your valuable journal, and then the merchants in the various cities within the States doing the advertising would furnish you with a list of their Northern correspondents and have you mail broadcast to them, with the compliments of the merchants, the information published by you each week at the expense of the merchants or the State doing the advertising, for 12 months, or for a much shorter period, it would, in my opinion, cause large investments to be made in city properties, farms, mineral lands and water-power.

The money lenders would likewise be attracted and large loans could easily be obtained.

The South is growing by leaps and bounds as never before. The cities and States doing the most advertising are reaping the benefit, but not any of them are spending one-tenth of what they should in order to bring to the attention of those seeking an outlet for their money the advantages of their respective localities and what they have to offer as profitable investments.

I visited this city four years ago, and was astounded when I came back here only a few months ago to see the wonderful improvements and the many large buildings which had been erected during my absence, and I predict a great future for this city. The people of Atlanta all pull together, and when strangers come here seeking investments they always find that the Atlanta people are well prepared to furnish any information desired at once.

If one can judge from the large amount of building now going on what the next 10 years will bring forth, he would predict a population for Atlanta of 250,000 to 300,000 people.

It is really something very remarkable to observe the growth of this city and also the progressive spirit of the Atlanta people.

Yours very truly,

D. R. CREECH, JR.

Improved Highways in Fulton County, Georgia.

[Special Correspondence Manufacturers' Record.]

Atlanta, Ga., July 2.

In the construction of improved roadways Fulton county, Georgia has been one of the most active and progressive in the South. So far over 300 miles of paved roadways from 20 to 80 feet in width have been built, these extending the full length of the county 30 miles, and the entire width about 13 miles. They have been so constructed as to connect at the county lines with the principal roads in the adjoining counties, and by this co-operative work continuous improved highways are avail-

settlements, thereby increasing the value of the lands in the vicinity of the improved roads and incidentally enhancing the taxable value of the property in such sections.

The result of having a well-defined policy for its road improvements has given Fulton county one of the best systems of improved roadways in the South, and as this policy will be maintained in all future work, it will not be many years before the county will have good roads penetrating its every section.

Among the more prominent of these

to be constructed during the present year is the one extending from Atlanta through East Point and College Park to the county line on the south. This road will be 60 feet wide and 10 miles long. The various widths mentioned refer only to that part of the roadway which is paved, and not to the full width of the road, as all of the roads are graded on either side of the paved portion. A unique feature regarding the construction of Fulton county roads is that stone gutters are placed on either side of the improved roads, as well as concrete sidewalks.

Up to the present time the roads have been mainly of macadam construction, but with the greatly increasing number of

been secured it is their intention to construct all future roads accordingly.

Fulton county has a well-organized department for the planning and construction of its roadways. Convict labor is almost exclusively used. Up to six years ago all misdemeanor convicts were available, under law, for road work, but since that time felony convicts have been added to this work. At the present time 550 convicts are being used and free labor to the extent of 150 men. In equipment the county owns and operates four stone crushers, four steam drills, five 10-ton steam road rollers, 260 mules, 100 two-horse wagons, 100 dump carts and all other necessary equipment for modern



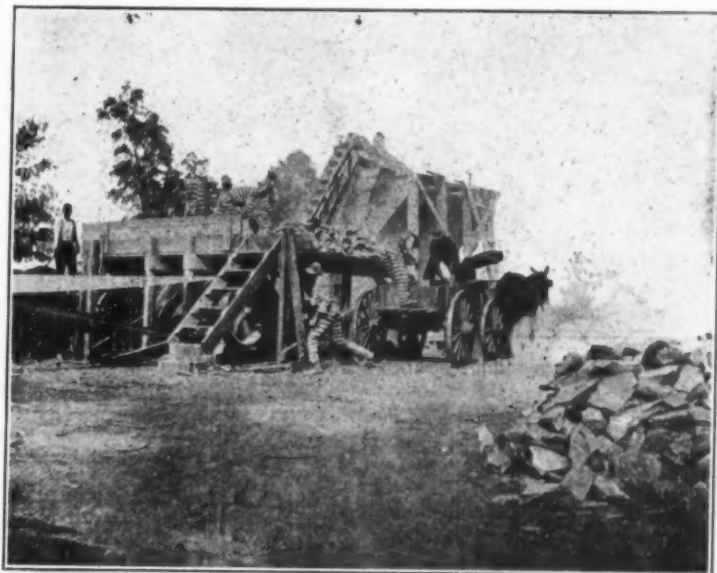
OILED SECTION PEACHTREE BOULEVARD, ATLANTA, GA.



CONSTRUCTING PLASTER BRIDGE ROAD, FULTON COUNTY, GEORGIA.



OILED SECTION OF STEWART AVENUE TO AUTOMOBILE RACING TRACK.



CRUSHING ROCK FOR FULTON COUNTY'S ROADS.

able. For the past four or five years about \$300,000 has been spent annually in the construction of new roads and the maintenance of old ones, and from 12 to 14 miles of improved roadways are secured each year. In the construction of its roads Fulton county has followed the policy of building first main highways extending north and south and east and west, with Atlanta as a hub, in order that continuous travel on good roads may be possible from one end of the county to the other. From time to time cross-roads to intersect these main highways have been built. By this policy the County Commissioners feel that the greatest good will be done to the greatest number. They have also constructed improved roadways into sections not so fully settled with the idea of developing them and inducing the location of more

main highways may be mentioned Peachtree boulevard, running from Atlanta to Buckhead, nine miles, and 80 feet wide, while from Buckhead to the county line in the direction of Roswell, Ga., this road continues for an additional 20 miles at a lesser width. The Pace Ferry road, 60 feet wide, extends from Buckhead due west to Cobb county. Howell Mill road, seven miles long and 20 feet wide, extends from Atlanta and connects with the Pace Ferry road. The Mayson & Turner Ferry road extends nine miles from Atlanta west to the Cobb county line, this road varying in width from 30 to 60 feet. Among the improved roads running south are Jonesboro road, Brown's Mill road, Stewart avenue, while there are numerous roadways extending from Atlanta east into De Kalb county. The most important road

automobiles in this section this character of construction has been found unable to withstand such traffic, and steps are being taken, through experiments now being made, to secure a proper binder that will prevent the automobiles destroying the roadbed. Some oiling has been done in the county, but the commissioners feel that while this will be of value in preserving some of the roads already constructed, it would be much wiser and much more economical in the end to so construct the roads to be built in the future that the automobile will not harm them. With this idea in mind a number of experiments are now being conducted, using various asphaltic preparations for thoroughly binding the road materials together, and when the commissioners feel that the proper method has

road construction. In the last two months \$10,000 has been expended for additional mules, and the commissioners are also considering the purchase of a large amount of new road machinery in order to undertake work on a larger scale. The county also has a complete equipment, valued at about \$5000, for laying bitulithic pavements. For obtaining crushed stone, which is the material used to the greater extent in road construction, the county owns several quarries, so that this material is obtained at small cost. At points not convenient to the county's quarries stone is obtained from private interests practically without cost, as those owning such quarries have shown themselves only too willing to assist in the building of modern roadways.

In the construction of improved roads a great deal of attention is given to main-

taining easy grades, and this involves a large amount of cuts and fills. Where bridges and culverts are necessary, concrete is being used exclusively, so that this work may be done in a lasting manner. A great deal of attention is always given to the manner in which roads are constructed in Fulton county, and as a result it has the reputation of having as fine a system of roadways as it is possible to obtain. No effort is spared in the initial construction to build them properly and enable them to hold up under traffic. While it is true that a number of the roads have been affected by the large amount of automobile traffic, the commissioners are closely studying this question, and every step will be taken to counteract the damage being done.

One of the accompanying illustrations shows a portion of Stewart avenue. This road was oiled for nine miles, and as it leads to the automobile racing track, a large number of cars pass over it, and the manner in which it has stood up under this traffic has impressed the commissioners with the value of oiling its established roads. Peachtree boulevard, leading out from Atlanta, has also been oiled for about

struction, has charge of all road improvement work.

Great interest is manifested by those throughout the county in the matter of good roads, and, from the use of roads already constructed, they have so realized the great benefits that come from them that they are enthusiastic on the question of obtaining improved roads in all parts of the county. As a result of this work property values throughout the county are steadily increasing. New sections are continually being opened up both for residential and farming purposes, and as this is consequently bringing with it a continual increase in taxable values, the county obtains increased revenue for its general expenses and is enabled thereby to continue improvement work on a much larger scale. The broad work which Fulton county has been doing in the construction of good roads should be an incentive to greater work of this kind on the part of other counties in the South, because it has been found that nothing tends to increase property values as much as the improvement of its roads.

WM. H. STONE.



POWERS FERRY ROAD, FULTON COUNTY, GEORGIA.

two miles, and it is the intention of the commissioners to oil other roads so as to preserve them. In and around the city limits of Atlanta some of the principal thoroughfares have been laid with bituminous pavement, the county having its own equipment for this purpose, and altogether about seven miles of road has been built with this material.

The funds for building the roads are drawn from the general tax levy. The taxable value of property in Fulton county is approximately \$75,000,000, and the State and county tax rate averages about \$1.10 to the hundred.

The county is now having an elaborate county map made, which will show all paved roads; the location of mileposts; class of paving; width of each road; location of all public buildings, farmhouses, railroads, car lines, etc.

The affairs of the county's roads are managed by a Board of County Commissioners of Roads and Revenues. The members of this board are Messrs. S. B. Turman, chairman; Forrest Adair, vice-chairman; Gen. Clifford L. Anderson, E. V. Carter and H. E. W. Palmer. Captain Donaldson, as superintendent of road con-

UTILIZATION OF GARBAGE.

How City Wastes Should Be Turned to Profit.

Crematories for the disposal of garbage in cities seem to the writer to be very much out of place. Why should we, the American people, burn so valuable a material as garbage, when the land throughout the Eastern and Middle States is calling so loudly for it?

According to the census of 1900, more than 50 per cent. of the people of the United States are living in cities and towns. All the food used by the cities and towns must necessarily come from the country, and the farms are becoming depleted, worn out, starved to death, and this will continue unless we put back on the land that which we have taken from it in the way of fertilizer.

We can no longer go to the Western prairies for rich land. There are yet millions of acres of very rich land in Northwest Canada, and last year more than 100,000 of the young men and women, flower of this country, mostly from the farming districts, went there to take up farms, and, according to reports, there will be double this number this year. But

even this land in the Northwest will soon become depleted, and the yield will soon begin to decrease.

Take, for example, the State of Ohio, which is one of the best, if not the best, of wheat-producing States in the Union. Statistics show that we are producing in this State less than one-half the amount of wheat per acre that they are now producing in Germany and England.

The present census will undoubtedly show an increase of the number of people living in cities and towns, and it is no more than fair to assume that the number of people now living in the cities and towns is not less than 40,000,000, and probably 50,000,000. Of course, there are many small towns where it might not be practical to put in garbage plants, but in all the large and medium-sized cities this should be done. Statistics show that on an average the quantity of garbage produced in cities is one-half pound per day for each inhabitant. Allowing 40,000,000 of people living in the large cities, this means 20,000,000 pounds, or 10,000 tons of garbage produced a day.

Mind you, in speaking of garbage it

So far we have spoken only about the money value, but this is not the main object of this article. The true fact is that this is not only a loss, but it is robbing the land, and it ought to go back to the land to produce the crops. To illustrate, 30 years ago Cuyahoga county, Ohio, was importing wheat. It absolutely did not raise enough for its own use. At that time people commenced to buy commercial fertilizer, and now each township buys hundreds of tons each year. The result is that Cuyahoga county is one of the best wheat-producing counties in the State of Ohio.

The writer distinctly remembers making a contract with the Cleveland Provision Co. about 30 years ago, securing all of its tankage, which amounted to about five tons a day, and contained a large amount of grease, also all the hair, for drawing it away. The hair was sold for about \$1200 a year. The tankage was sold to a gardner to be used for fertilizer. To-day this same company undoubtedly realizes not less than \$100 a day for this same material that it was glad to give away 30 years ago.



ROSWELL ROAD, FULTON COUNTY, GEORGIA.

means only a small percentage of the dead animals, the refuse from slaughter-houses, scraps from meat markets and hotels. These are valuable, and are sold at a good price to private companies. The garbage collected by this city consists of the following, which no doubt is about the average of all cities:

Rubbish, 6 per cent., or 200 lbs. to the ton.
Water, 75 per cent., or 1500 lbs. to the ton.
Dried tankage, 15 per cent., or 300 lbs. to the ton.
Grease, 4 per cent., or 80 lbs. to the ton.

The present values are as follows:

80 lbs of grease, 3½c. a pound.....\$2.80
300 lbs. of tankage, \$7.50 a ton.....1.12

Total value of grease and tankage from a ton.....\$3.92

There is always a ready sale for the grease, and also a very ready sale for the tankage. A ton of dried garbage tankage consists of about the following:

9 per cent. bone phosphate of lime worth.....\$0.90
4 per cent. ammonia worth.....13.00
1 per cent. potash worth......70

Total for a ton of tankage.....\$14.60

These are prices paid by the large manufacturers of commercial fertilizer.

The time is right here when this tremendous waste ought to be stopped. It must necessarily come to this. Every city should do its utmost to save the garbage and put it back from whence it came, into good crops, which means lower prices for provisions. One principal reason for the high cost of living is that farms are not producing today what they ought to produce per acre, and the easiest way to make an increase is by saving this large and increasing waste from cities and restoring it to the land to produce wheat, corn, grass, potatoes and other vegetables and fruit.

C. O. BARTLETT.

Cleveland, O.

The Oklahoma Cotton Seed Crushers' Association has been organized with Messrs. W. L. Clayton, Oklahoma City, president; R. E. Montgomery, Lawton, vice-president; W. F. Shewey, Muskogee, secretary and treasurer, and R. A. Vose, Oklahoma City; J. W. Dupree, Oklahoma City; W. H. Lillard, Fort Smith, Ark.; R. K. Wooten, Chickasha, Okla.; W. A. Wimbish, Ardmore, Okla.; P. A. Norris, Shawnee, Okla., governing committee.

SOUTHERN COMMERCIAL BODIES WANT INDUSTRIES

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS' RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS' RECORD accepts no paid town write-ups. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

This department is open only to news facts of interest to investors and homeseekers. Communications of 200 or 300 words are likely to be given prompter publicity than more extended ones.

TEXAS CITY'S GROWTH.

Texas City, Tex., June 23.

Editor Manufacturers' Record:

The interest recently manifested by manufacturers from all over the country in Texas City would seem to justify the belief held by so many well-informed men that this port is destined in the near future to a prominent place among the shipping and industrial points of the Southern coast.

It is interesting to note, when summing up the advantages of Texas City, that all those things which have always been regarded as prerequisites to the upbuilding of great industrial and commercial centers are to be found here. Therefore, the recent wonderful developments at this place cease to be a source of wonder.

Here we have plenty of room for the building of terminal facilities, the foundation for which is firm mainland ground, free from the action of turbulent waters or other forces of nature, such as other seaports have had to contend with. No expensive causeways need be built. No filling is necessary, the place having a natural elevation of more than 12½ feet. And finally, a geographical location is afforded favorable to the establishment of trade relations with the whole world.

A casual glance at the figures regarding the business carried on via Texas City will certainly remove the haze of doubt from the minds of those who, having neglected to give conditions here any considerable thought, are inclined to a view of pessimism. Last year the total foreign imports via Texas City aggregated \$788,569, while foreign exports via this port amounted to \$2,285,875. These figures, taken together with those of the coastwise commerce, which totaled up \$31,064,000, show conclusively that Texas City, though still in the embryo (as far as being a great city is concerned), is nevertheless a natural and logical shipping point of the Gulf coast. Otherwise, why should this enormous tonnage divert to a point which up to a short time ago was scarcely known outside of Galveston county?

With the increased shipping, docking and warehousing facilities now in course of construction here, involving the expenditure of millions of dollars, and fashioned after the most modern in the world; with the rapid progress of the work of deepening of the channels and waterways (which are even now capable of accommodating the largest ocean-going vessels); with the extremely low rate of insurance (being one-quarter to one-half per cent.), made possible by fire protection and the fireproof construction of warehouse and docks, together with the fact that wharfage charges are entirely eliminated, it is not too much to say that the most extravagant hopes of those who struggled here so long are now to be fully realized.

While the above concerns mainly water transportation, the same is also true of facilities for transportation by rail. Texas City's terminal railway, with its 25 miles of switch track, connects with all of the roads running into Galveston (including seven great systems), and these, when

traced to their inception, cover a territory bounded only by the two oceans and the dominion of Canada. With so favorable a location, and with such excellent facilities for both rail and water transportation, are we not justified in believing the optimism of our good citizens to be well founded?

It is intended to speak here only of the advantages of Texas City as a shipping center. Space, therefore, forbids the discussion of other points of equal interest. It may be incidentally remarked, however, that the advantages and inducements for the establishment of manufacturing enterprises are not a whit less alluring. Here we have immediate access to inexhaustible quantities of raw material of almost every conceivable kind; an abundance of pure artesian water which is encountered but a short distance below the surface soil; cheap fuel; cheap electrical power; intelligent labor; a ready market for the finished product, and last, but not least, a climate which, from the viewpoint of health, is not to be excelled anywhere in the world.

With conditions so very favorable, and with capital and business enterprise slowly, but surely, gravitating toward this point, the prominent future of Texas City may well be regarded as an assured fact.

EDWARD T. GLIOT.

MENA INDUSTRIES.

Mena, Ark., June 21.

Editor Manufacturers' Record:

This city, the county seat of Polk county, has a population of 6000 (all white), has an up-to-date ice factory, electric-light plant, city water-works and sewerage, 30 miles of concrete sidewalks, good streets, numerous handsome residences and substantial business houses. Mena is located on the Kansas City Southern Railway, 380 miles south of Kansas City, and is in the center of a very rapidly developing country, it being the only town of any importance within a radius of 50 miles. The elevation within the city limits is from 1200 to 1600 feet above the sea level, while 11 miles from Mena Rich Mountain reaches an elevation of 2950 feet, the highest point in Arkansas. The records for the past 10 years show that there have been very few occasions when the temperature was higher than 90 degrees or lower than 25 degrees Fahrenheit. This city is located in what is known as the Ozark Mountain Range; is beautifully situated in a valley surrounded by mountain ranges, and the country is literally covered with streams of pure soft water fed by numerous springs, some of which being strong in mineral and medicinal properties. A singular fact to which I would like to call your particular attention is that there is a living stream on every square mile in this county, all of which, without exception, have their origin within the county's boundaries. Such a thing as malaria is unknown in this locality. Our citizens have recently incorporated under the name of the Mena Improvement Association for the purpose of raising money to be used in the development of the city in whatever way the board of directors may see fit. It is expected to

secure at least \$50,000 and to expend same in interesting industries, hotels or any other interest which would help to develop the city. We believe this to be an ideal place for a textile manufacturing plant. On account of the large amount of hardwood timber, we believe also that a furniture factory or any concern using hardwood could be successfully operated. There is also on the mountains large quantities of both pine and hardwood timber not of sufficient grade for other purposes, which would be of value in other ways, such as the manufacture of nail kegs, excelsior, etc.

On account of our climate, altitude, water, etc., this could unquestionably be made a very successful health and pleasure resort both winter and summer, and we are very greatly in need of a resort hotel at the present time.

A list of manufacturing concerns already located here are a box and veneer factory, two planing mills, one sawmill and a canning factory. The Mena Improvement Association is very anxious to get in communication with any responsible parties who would like to investigate further along any of the above lines.

G. B. WOOD.

TO DEVELOP DEMOPOLIS.

Business League,

Demopolis, Ala., June 14.

Editor Manufacturers' Record:

We have just organized a live Business League, and expect to do earnest work to develop this section. We have advantages enjoyed by few towns. We are located on the Warrior, Little Bigbee and Tombigbee rivers. The Warrior is open all the year to above Tuscaloosa, which is in the heart of the coal and iron district. The Little Bigbee drains West Alabama and East Mississippi, and the Tombigbee enters Mobile Bay. This gives us water transportation to the coal fields 100 miles north of us and deep water 240 miles to the south of us. There is an inexhaustible supply of the finest cement rock here, and adjacent is the clay and sand. We are in the heart of the hardwood belt, and in the immediate center of the best cotton and alfalfa lands in the South.

JESSE B. HEARIN.

GULFPORT ACTIVE.

Commercial Union,

Gulfport, Miss., June 11.

Editor Manufacturers' Record:

The question of a fair this fall is now beyond the peradventure of a doubt, all of the stock placed on the market is practically sold, amounting to \$12,500, and officers have been elected as follows: President, W. H. Boulsoy; first vice-president, Mr. Geo. P. Hewes, and second vice-president and manager, C. J. Barrow. The land has been surveyed, the engineers are figuring on an average grade for the grounds, and as soon as this work has been completed bids for clearing, grading, building and other improvements will be asked for. It is the intention of this association to put the entire \$25,000 in grounds and improvements before the fall fair is held. The land only cost \$6000, so that leaves \$19,000 for buildings and other improvements. This will give us fair grounds equal to most anything in the State.

The various railroads have issued their tariffs on this commodity on cotton, giving Gulfport the same rate as New Orleans and Mobile now enjoy, and we feel certain that this traffic will at once commence moving to foreign cities through this port.

The new Government building is nearing completion, and it is thought that a

few months will see it ready for occupancy.

S. H. WALTHALL,
Secretary.

SUFFOLK'S NEEDS.

Board of Trade,

Suffolk, Va., June 11.

Editor Manufacturers' Record:

Suffolk is a hustling, bustling city of 10,000 people, healthy, prosperous and happy, and is recognized the world over as the largest peanut market in the United States. With its six railroads and deep water to the sea, it is one of if not the best distributing and manufacturing point in the entire South.

Located in Tidewater Virginia, in the rich agricultural section, and adjacent to the timber lands and lumber-producing points in the South, and is especially suitable location for most any form of wood-working plant.

The Farmers' Bank of Nansemond in Suffolk has a capital of \$20,000 and a surplus of \$500,000.

The million-dollar water plant of the Suffolk, Portsmouth & Berkley Water Co. not only furnishes good water to Suffolk, but pumps water to towns 20 miles distant.

With the best of schools and churches, and with its wide and well-paved streets and good water, electricity and gas, Suffolk is an ideal residential city.

Suffolk now has four lumber and wood-working plants, three knitting mills, one buggy factory, two veneer and basket works, one pork-packing plant, four brick plants, seven peanut factories, three wholesale feed and fuel houses, three wholesale grocery houses, three wholesale drug houses, two oyster-packing plants, one large lime kiln and three peanut storage warehouses.

Suffolk is in need of the following factories: Sash, doors and blind, chair, table, handle and spoke, toy, stove, heading, broom, window screen, furniture, overall and shirt, fertilizer, cottonseed oil, textile and automobile.

General climatic conditions above a generous soil permit continuous farming and two crops a year, as a rule.

The man with agricultural inclination with small means can find no better investment for his time and money than in this rich agricultural section, with its good railroad facilities bringing you near all Northern markets.

H. N. FITZGERALD,
Secretary.

BATON ROUGE A PORT.

Board of Trade,

Baton Rouge, La., June 16.

Editor Manufacturers' Record:

Among the many items of interest in the progress of Baton Rouge at this time is one of recent date, namely, the arrival at this port of the Standard Oil Co.'s ocean-going vessel, the Capt. A. F. Lucas, Thomas Fenlon, master. This vessel arrived in Baton Rouge on Wednesday, June 8, it being the first commercial vessel to arrive at this port. This merely marks the opening of the port of Baton Rouge and demonstrates to the world the adaptability of the Mississippi River at this point, one of the greatest Southern harbors in this country.

F. B. MCQUEETY,
Secretary.

Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 92, 93, 94, and under "Cities, Towns and Railroads Inviting Factories" on 143, 144, 145, 146, 147 and 148.

The Galveston (Tex.) Waste Mills has increased capital stock from \$10,000 to \$20,000.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

New Railroad Enterprises.

Among the new railroad enterprises recently chartered or organized are the following:

Stamford & Eastern Railway Co. organized at Stamford, Tex., to build a line 60 or 70 miles long from Stamford eastward to develop coal fields. W. T. Andrews, president of the enterprise, is quoted as saying that the plan has been financed for the entire line, and survey will begin immediately. A charter will also be secured. The incorporators and directors, who are all residents of Stamford, are W. T. Andrews, R. V. Colbert, Frank S. Hastings, P. P. Berthelot, R. L. Penick, J. C. Bryant, B. E. Sparks, L. M. Buie, J. A. White, Charles Brewington and T. M. Richardson.

The Lewisburg & Northern Railroad Co. of Marshall county, Tenn., chartered to build a line from a point near Athens, Ala., to Brentwood via Elkton and Lewisburg, Tenn., about 85 miles. Alexander Austin of Elkton is reported as saying that the Louisville & Nashville Railroad is back of the enterprise, and it will gain a shorter route between Athens and Nashville, besides avoiding some heavy grades and a tunnel; capital \$100,000. The incorporators are R. C. Armstrong, C. C. Houston and J. A. Hardison of Lewisburg, Tenn.; D. C. Sherrell of Delrose, Tenn., and Alexander Austin of Elkton, Tenn. The line will cross from Alabama, in Giles county, and will extend north to Sumner county, Tennessee.

Washington-Virginia Railway Co. chartered to build an electric line from Vienna, in Fairfax county, Virginia, to Bluemont, in Loudoun county, Virginia, 50 miles; capital \$1,000,000; headquarters at Falls Church, Va. It will connect with an electric line already in operation from Washington to Vienna. The officers are M. E. Church, president; G. B. Fadeley, vice-president; F. E. Parker, secretary; L. L. Northrop, treasurer, all of Falls Church.

TO IRON-ORE LANDS.

Santa Fe Reported Building Road—Chas. M. Schwab and Others Interested.

A dispatch from Galveston, Tex., says that the Gulf, Colorado & Santa Fe Railway has begun the construction of its long talked of railroad northward from Longview, Tex., into Cass county to develop iron-ore fields, and that this is being done because the Bethlehem Steel Works of Bethlehem, Pa., in which Charles M. Schwab and associates are interested, will ship not less than 1,000,000 tons of ore over the line.

It is furthermore stated that Mr. Schwab has an option on about 25,000 acres of iron-ore land in Cass county, and he is reported as saying that if plans mature there will be erected an iron plant somewhere on the Texas coast, where the ore will be treated before shipment to the Bethlehem Steel Works. A number of Texas people are said to be concerned in the enterprise.

"ORIENT" BONDS SOLD.

Line to Mexico City Financed by Securities Deal Closed in London.

The Kansas City, Mexico & Orient Railway, says an official telegram to the MANUFACTURERS' RECORD, has closed a deal in London by which \$5,000,000 of its bonds are sold to bankers of that city.

The proceeds of this loan will be used to complete the company's line via Del Rio, Tex., upon which several contracts have

been already let to Roach & Stansell of Memphis, Tenn. This line when completed will give a direct route to the City of Mexico.

The company is also pushing work on its main line, which will provide a short route between Kansas City and the Pacific coast of Mexico.

INDEPENDENT RAILROAD.

Lumber Lines in Mississippi Said to Be Combining for an Extension.

According to a report from New Orleans, the New Orleans, Mobile & Chicago Railroad, the Mississippi Central Railroad and the New Orleans Great Northern Railroad, together with several lumber lines connecting with them in Mississippi, are contemplating the formation of a company, in which all will be interested, to build an extension northward to the Ohio River for their joint accommodation. It is said that the plan will be financed in Europe, probably in France and Germany.

L. S. Berg, president of the first-named road, which was formerly the Mobile, Jackson & Kansas City; F. L. Peck of Scranton, Pa., president of the Mississippi Central, and Sol. Wexler of New Orleans are reported working on the proposition, the latter having presented the plans to bankers abroad.

For some time, several years, in fact, the Mobile, Jackson & Kansas City proposed to build an extension northward from Middleton, Tenn., to the Ohio River, but the financial troubles of 1907 interfered. It seems likely that the extension, if constructed, will be from that point. There will also be a line, it is expected, into New Orleans, and the lumbermen interested are said to be particularly earnest in the matter because the plan, if fulfilled, will give them an independent railroad for carrying their output to market.

GAS-ELECTRIC CARS.

Southern Railway Will Receive Two for Use Around Greenville, S. C.

The two gas-electric motor cars now being built by the General Electric Co. for the Southern Railway Co., to be used on the lines in the Greenville (S. C.) territory are 55 feet long, and made to seat 52 passengers, with passenger space divided for the separation of white and colored passengers. The forward trucks are equipped with two motors of 100 horse-power each, and in the forward compartment is located the power plant, consisting of a gasoline engine and an electric generator of 150 horse-power capacity. There is no mechanical connection between the power generating plant and the motor trucks, the power being transmitted by electricity and controlled by a device similar to the controller on a trolley car, whereby the car may be started, accelerated, stopped and reversed. The maximum speed is between 50 and 60 miles per hour, and the car can be stopped and reversed without stopping or changing the direction of rotation of the gas engine. The car body is built of steel, suitably cross-braced. The couplings conform to standard in height and design, and the forward end is protected by a substantial pilot.

The forward motor truck has a wheel base of 6 feet 6 inches, and is equipped with standard 33-inch wheels, boxes and axles, equalized, and with swinging bolster, the weight being approximately 9500 pounds. The rear truck is substantially the same as the motor truck, but the weight is only 6750 pounds. The motors are mounted directly upon the axles. The power plant consists of an eight-cylinder four-cycle gasoline engine, directly connected to a generator. The cylinders are eight inches diameter by eight-inch stroke, made of cast iron and water-jacketed. Engine cooling is provided by means of

thermo syphon circulation in radiators of fin type. The ignition system consists of high-tension magneto and plugs. The carburetor is of overflow type, with water jacket and with adjustable control for warm air supply, gasoline being supplied by means of a plunger pump. An air pump, driven from the main crankshaft of the engine, supplies air for the brakes and whistles. Combined straight and automatic airbrakes are provided, the straight air being used when the car is operated alone, and the automatic air when hauling a trailer. In addition to the airbrakes, there are suitable hand brakes conveniently located. The gasoline engine is started by compressed air from the main reservoir.

The body of the car is heated by a system of hot water circulation on the thermo syphon system, the heat being obtained from the exhaust gases. The interiors of the cars are finished in mahogany, upholstered in plush, and make a handsome appearance, the accessories being those usually carried.

TEXAS CENTRAL BOUGHT.

Sale of M., K. & T. Securities Accompanied by Announcement.

Dispatches from New York state that the Missouri, Kansas & Texas Railway Company has sold to Speyer & Co \$10,000,000 of one year 5 per cent. notes to finance its new terminals at St. Louis, previously noted, to provide for some new equipment, and to purchase stock of the Texas Central Railroad.

The latter formal announcement confirms rumors that the recent purchase of the Texas Central by R. H. Baker of Houston, Texas., was really for the Missouri, Kansas & Texas Railway Co. It is said that the latter obtains \$3,856,400 of stock of the Texas Central out of a total of \$4,000,000. Against this it is proposed to issue \$3,700,000 of consolidated mortgage bond and \$300,000 of stock.

New Equipment, Rails, Etc.

The New Orleans, Mobile & Chicago Railway, according to a market report, has ordered 550 tons of Bessemer rails, heavy sections, which will be rolled at the Ensley (Ala.) plant of the Tennessee Coal & Iron Co.

The Chicago & Alton Railway is reported getting prices on locomotives.

The Texas City Transportation Co., Texas City, Tex., is said to have ordered 400 tons of steel from the American Bridge Co., New York.

The Western Maryland Railway has awarded contract for 12,000 tons of bridge steel to the McClintic-Marshall Construction Co. of Pittsburgh for bridges on its extension to Connellsville, Pa.

The Chesapeake & Ohio Railway is reported in the market for 10 locomotives.

The Georgia Railroad, according to a market report, will build 100 cars in its shops at Augusta, Ga., including 65 box cars, 25 coal cars and 10 stock cars.

A dispatch from New York says that part of a \$10,000,000 note issue by the Missouri, Kansas & Texas Railway will be used to purchase new equipment. The notes were sold to Speyer & Co., and are one-year 5 per cents.

M. M. Phinney, representing the Stone & Webster Corporation of Boston, is quoted at Houston, Texas, as saying that contracts for equipment on the Galveston-Houston Electric Interurban Railway will be let within a month. Ten high power cars and an electric locomotive may be bought.

On the Altus, Lubbock & Roswell.

Ed. Kennedy, Houston, Tex., writes that he is building the western end of the Altus, Lubbock & Roswell Railroad from

Memphis, Tex., to Silverton, Tex.; from Silverton to Lockney, and from there to Petersburg, Tex. Thence it runs to Lubbock, Tex., and extends west into New Mexico at or near Roswell, a distance of 300 miles.

The eastern end of the line, from Altus, Okla., to Wellington, Tex., 60 miles, was bought by the Wichita Falls & Northwestern Railway with a contract to lay the steel and finish the work, and the western end from Memphis to Roswell was turned over to the Texas Contracting Co., which is now working from Cap Rock to Lubbock. The work is going along very nicely. The head offices are in Kansas City, Mo., and Memphis, Tex. Mr. M. Parks is president, and W. V. Kennedy, vice-president and secretary; office at Memphis, Tex.

Between Memphis and Roswell there has been raised in bonuses approximately \$600,000, and Mr. Kennedy says they are being paid very promptly, so that everything is getting along satisfactorily, and about 100 miles are now graded.

Several years ago Mr. Kennedy promoted and began construction of the Beaumont, Sour Lake & Western Railway, which is now one of the Frisco lines.

The directors of the Altus, Lubbock & Roswell Railroad Co. are Ed. Kennedy, president, Houston, Tex.; W. V. Kennedy, Memphis, Tex.; R. S. Lemon and Marion Parks, Scarrett Building, Kansas City, Mo.; Fred Biffel and H. G. Stone, Silverton, Tex.; W. L. Wheelock and W. B. Slayton, Lubbock, Tex. Head offices are at Memphis and Lubbock, Tex.

Chesapeake & Ohio Coal Extension.

A report from Fayetteville, W. Va., says that representatives of the Chesapeake & Ohio Railway have filed a map covering a contemplated branch from the mouth of Twenty-mile Creek, on Gauley River, along Gauley River and Meadow River to Rupert, W. Va., 61 miles.

It will be known as the Meadow River extension of the Gauley River branch of the Chesapeake & Ohio, and will, it is said, open up some of the most valuable coal and timber lands in Fayette, Nicholas and Greenbrier counties, including a tract of 7500 acres of the Gauley Coal Land Co., 34,000 acres of the Beury estate, most of which is said to be owned by T. W. Raine; 14,000 acres of the Foulk estate, 900 acres owned of the Amick and McClung lands, 5000 acres of the Bracken's Creek Coal & Land Co., several thousand acres belonging to the Flynn Lumber Co. of Pittsburg, besides the lands of the Gauley Mountain Coal & Coke Co.

It is further said that the Chesapeake & Ohio has decided to secure rights of way and begin construction as soon as possible; also that the survey shows that a grade of less than 1 per cent. can be secured.

Brownwood to Gainesville, Tex.

A letter to the MANUFACTURERS' RECORD presents a map of and describes the proposed Chicago, Weatherford & Brazos Valley Railroad, which is to run from Brownwood, Tex., via De Leon, Weatherford and Bridgeport to Gainesville, Tex. This line, it is said, will be of advantage to the Santa Fe system, and it is expected by many that it will be taken over by that system as soon as completed. The route is described as being through a thickly settled country which is capable of high development. At Bridgeport are some of the largest coal fields in Texas, and there are indications of coal and oil at other points. R. K. Phillips, Weatherford, Tex., may be able to give further information.

The C. & O.'s Line to Chicago.

The Chesapeake & Ohio Railroad Co. of Indiana has been organized, according

to a dispatch from Richmond, in that State, to take over and operate the Chicago, Cincinnati & Louisville Railroad, recently purchased at receivers' sale by the interests backing the Chesapeake & Ohio Railway system, and which will provide the latter with a line to Chicago. The telegram says that Frank M. Whittaker of Richmond, Va., was elected president; Henry C. Starr of Richmond, Ind., vice-president, and James Stewart Mackie of New York, secretary.

The improvement of the purchased road is said to have begun, and it is intended to build a connection at Cincinnati, so that trains may be run through from Newport News, Va., to Chicago.

An interesting report in connection with the Chesapeake & Ohio's deals to secure Western outlets is that the Virginian Railway may by a traffic arrangement also secure the benefit of those connections to the Great Lakes, although this refers particularly to the Kanawha & Michigan and Hocking Valley purchases.

Office Building and Depot Addition.

F. G. Pettibone, vice-president and general manager of the Gulf, Colorado & Santa Fe Railway, which is the Texas corporation of the Santa Fe system, is quoted as saying that it will probably be a year before construction begins on the proposed general office building to be erected on the ground recently acquired in Galveston, and which will be practically an addition to the present office building there. But the new structure is to cost about \$200,000, and, in addition to this, the company will spend about \$100,000 for new tracks in the Galveston union station. The property acquired is between 25th and 26th street, on Strand street, and more is to be purchased in connection with the track work. The improvement plans will require the closing of Strand street (Avenue B) from 25th to 28 street. The result of these improvements will provide a considerable addition to the depot.

C. & O. Earnings.

The Chesapeake & Ohio Railway reports for May, 1910, total revenues \$2,549,710, an increase of 7 per cent. as compared with May of last year. The increase in freight revenue is 5 per cent., and the increase in passenger revenue 16 per cent. Revenue from other sources increased 42 per cent. Operating expenses were \$1,657,878, an increase of 14 per cent. The net earnings, therefore, were \$891,832 for the month.

For the 11 months of the fiscal year ended May 31 the total operating revenues were \$28,721,609, increase \$4,508,484, or 19 per cent.; net operating revenue, \$11,470,304, increase \$2,162,690, or 23 per cent. After the deduction of fixed charges, taxes, etc., the surplus was \$5,769,623, increase \$2,236,904, or 63 per cent.

New Iberia to Morgan City.

The Iberia, St. Mary & Eastern Railroad of New Iberia, La., proposes to build a line 52 miles long from New Iberia via Franklin and Jeanerette to Morgan City, La. There will be two drawbridges over the Bayou Teche. The route is through level country. The company is not yet ready to let contract. F. M. Welch is president, H. N. Pharr is treasurer and H. A. Genung is chief engineer.

Llano Branch May Be Extended.

An interesting report concerning the Southern Pacific system is that the company contemplates building an extension of its branch, which now terminates at Llano, Tex., about 75 miles, to connect with the line of the Frisco system now being extended from Brady to Menardville. It is said that the reason for this is the

development of a large body of iron ore near Llano, and that the railroad company is preparing to handle considerable of the ore to Galveston and New Orleans for shipment to iron and steel works in other parts of the country. There is some talk that the extension may be continued to Sanderson, Tex., which is on the main line of the Southern Pacific, about 250 miles from Llano.

Bluemont to Vienna.

An officer of the Washington-Virginia Railway Co., lately chartered in Virginia, confirms the report that it is to build a line from Bluemont to Vienna, Va., 50 miles, via Leesburg or Aldie, and through rolling country. The motive power will be either electricity or gasoline. Connection may be made with either or all of the following roads: Southern Railway, Washington, Alexandria & Mt. Vernon Electric Railway, Washington, Arlington & Falls Church Electric Railway or the Great Falls & Old Dominion Electric Railway. The directors are: President and general manager, M. E. Church; vice-president, George B. Fadeley; treasurer, L. L. Northrup; secretary, F. E. Parker; O. B. Livingston, H. C. Houston and T. M. Talbott, all of Falls Church, Va.

Extension and a Resort.

The New Orleans Railway & Light Co. has bought a 50-year franchise to extend the West End Railroad to Spanish Fort, and President Hugh McCloskey is quoted as saying that about six months will be required to build it. At first the extension may be single track, but it must be double-tracked within five years. A bridge over Bayou St. John will be required. Construction must be begun within 90 days, but it is expected that the work will really be started within a month. This plan includes the opening of Spanish Fort as an amusement resort.

B. & O. Statement.

The May statement of the Baltimore & Ohio Railroad Co. shows gross earnings \$7,629,509, increase as compared with May of last year \$1,286,958; net earnings \$2,109,094, increase \$106,221. For the 11 months of the fiscal year ended May 31 the gross earnings were \$79,143,355, increase as compared with the same period of the last fiscal year \$10,923,885; net earnings \$24,573,393, increase \$1,914,104. It appears that there was a heavy increase in expenses for May, 1910, due principally, it is said, to increasing the pay of employes.

Deering Southwestern Extension.

The Deering Southwestern Railway of Deering, Mo., proposes to build an extension from Deering to Caruthersville, Mo., about 13 miles, also from Camp to Hornersville, Mo., about seven miles, making connection at Camp with the Frisco system and at Hornersville with the St. Louis Southwestern. The route lies through flat country, and part of the right of way is covered with timber. F. B. Montgomery is president of the road, which has general offices in the Harvester Building at Chicago, Ill.

Railroad in Northern Georgia.

Dispatches from Gainesville, Ga., say that it is expected a railroad will be constructed northward from Gainesville to either Blue Ridge, Ga., or Murphy, N. C., 55 or 60 miles, for the purpose of opening up timber lands which capitalists are investigating. Thomas M. Bell, representative in Congress from the ninth district of Georgia, who resides at Gainesville, is said to be working on the development plan, and among others mentioned as interested are Col. J. A. Finch, Washington,

D. C.; William E. Cox, another Congressman, who resides at Jasper, Ind., besides Albert Fenn, also of Indiana, and W. A. Winburn, vice-president of the Central of Georgia Railway at Savannah.

Norfolk & Western Report.

A report from Roanoke, Va., says that the Norfolk & Western Railway's statement for May shows total earnings \$3,052,689, increase as compared with May of last year \$531,021; net earnings \$1,098,921, increase \$106,088. For the 11 months ended May 31 the total earnings were \$32,061,947, increase as compared with the corresponding period of the last fiscal year \$5,480,296; net earnings \$12,938,995, increase \$2,462,669. Expenses increased over \$3,000,000.

Railroad Notes.

The Charleston (S. C.) Consolidated Railway, Gas & Electric Co. has been authorized to increase its capital stock by the issue of \$500,000 of preferred, making the total \$2,000,000.

The Chesapeake & Ohio Railway Co. has completed and will open immediately a new freight depot at Newport News, Va., the contractor for which was D. J. Phipps. It is situated on 23d street, near Huntington avenue, and is a one-story structure of brick, with metal roof, 150x87 feet.

A dispatch from Brownsville, Tex., says that the new bridge over the Rio Grande between Brownsville and Matamoros, Mex., is practically completed. It will afford a crossing for railroads and also a highway for vehicles and pedestrians.

A letter to the MANUFACTURERS' RECORD says that W. S. Whittinghill of Enid, Okla., president of the Enid & Central Oklahoma Traction Co., states that arrangements for financing the line by Lloyd-Ellinger, Ltd., of London, England, are nearing completion.

The Central of Georgia Railway has opened its new freight station at Chattanooga, Tenn. It is situated on Market street, between the freight house of the Queen & Crescent system and the new terminal station. The building is 42 feet wide and is 240 feet deep. The front is two stories high and contains offices. Five tracks adjoin the structure, which is built of brick, with concrete floors.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Mobile, Ala.—Board of Aldermen authorized \$117,000 bond issue for improvements included in eighth paving venture.

Red Oak, Tex.—Red Oak District of Ellis county voted issuance of bonds for road construction.

Bonds to Be Voted.

Chatham, Tex.—City votes July 28 on issuing \$7000 bonds for street improvements.

Mexia, Tex.—Limestone county votes July 16 on issuing \$200,000 bonds for constructing rock roads.

Rome, Ga.—City will vote on issuing \$35,000 of bonds for street paving.

Contracts Awarded.

Chattanooga, Tenn.—City awarded contract for asphalt, asphalt macadam and brick pavement on several streets.

Dallas, Tex.—City awarded contract for bitulithic paving at about \$8900.

Houston, Tex.—Harris county awarded contract at \$9000 for construction of boulevard.

Lexington, Ky.—City awarded contract

for reconstruction of paving on Limestone street.

Little Rock, Ark.—City awarded contract for macadamizing on Prospect avenue.

Nashville, Tenn.—City awarded contract at about \$4400 for grading, macadamizing and rolling on Ninth avenue.

Nashville, Tenn.—Board of Public Works awarded contracts for 70,000 square feet of granitoid concrete curbing and sidewalks.

Nowata, Okla.—City awarded contract for constructing 38,442 square yards of brick pavement with combined curb and gutter and storm sewers.

Richmond, Va.—City awarded contract for paving on Monument street; appropriation, \$20,000.

Waco, Tex.—City awarded contract for bitulithic paving on Austin street.

Contracts to Be Awarded.

Amarillo, Tex.—City opens bids July 25 for constructing 80,000 square yards of pavement with bitulithic, vitrified brick, sheet asphalt or rock asphalt.

Baltimore, Md.—City opens bids July 13 for paving on Fayette street.

Berlin, Ky.—Weaver & McClanahan Turnpike Co. was incorporated with \$4000 capital.

Birmingham, Ala.—City opened bids July 6 for certain grading and macadamizing and storm-sewer drains.

Dallas, Tex.—City opens bids July 11 for paving Allen street with creosoted pine blocks or vitrified brick blocks on concrete base.

Denison, Tex.—Grayson county opens bids August 10 for constructing 65 miles of macadamized road.

Frederick, Okla.—City will pave business-district streets with vitrified brick.

Fulton, Ky.—City has engaged engineer to prepare plans and specifications for sidewalk paving.

Greenfield, S. C.—City opens bids July 23 for 29,000 square yards of street paving.

Helena, Ark.—City will pave principal streets.

Huntington, W. Va.—Board of Commissioners receives bids until July 25 for grading, draining, paving and curbing with vitrified brick, sheet asphalt, asphalt block or bitulithic; \$300,000 bond issue previously voted.

Lexington, Ky.—City opens bids July 9 for 24,530 square yards of paving, 3975 cubic yards of concrete and 775 feet of limestone or concrete curbing.

Little Rock, Ark.—City opened bids last week for two miles of macadamized paving; probable expenditure \$32,000.

Memphis, Tenn.—Shelby county opens bids July 9 for graveling about 20 miles of roads.

Pensacola, Fla.—City opens bids August 10 for constructing 525,000 square feet of concrete sidewalks.

Smithfield, N. C.—Town opens bids July 12 for constructing concrete sidewalks.

St. Augustine, Fla.—St. Johns county invites bids until August 1 for construction of road to Elkton and Hastings; \$30,000 available.

St. Petersburg, Fla.—City opens bids July 14 for vitrified brick and granite or cement curbing on two streets.

The Southern Textile Association, at its meeting last week at Augusta, Ga., elected Messrs. W. P. Hamrick, Columbia, S. C., president; Arthur T. Smith, Langley, S. C.; E. E. Boweb, Rockingham, N. C.; T. M. McIntire, Gastonia, N. C., and M. E. Stevens, Columbus, Ga., vice-presidents; G. S. Escott, Charlotte, N. C., treasurer; David Clark, Charlotte, N. C., secretary, and G. M. Stone, Spartanburg, S. C., secretary.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Paper from Pine.

The Beaumont Chamber of Commerce has launched a movement for the establishment of a paper mill at Beaumont, primarily to use tupelo gum timber, and the pine waste from the numerous large sawmills may also be utilized. It is stated that the hundreds of sawmills in the Beaumont country can supply slab stock enough to keep several large paper mills busy. The success of the yellow pine paper mill at Orange has revealed the great possibilities at Beaumont, which is the lumber center of Southeast Texas and Southwest Louisiana. A considerable amount of local capital is available for investment in a paper mill at Beaumont, and an effort is being made to interest experienced papermakers in the project. The supply of tupelo gum is sufficient to supply paper mills for many years, and it has been demonstrated that good paper can be made from it.

Mississippi Forests.

A study of the forest conditions of Southwestern Mississippi by J. S. Holmes and J. H. Foster has been published by the Mississippi Geological Survey. It includes a description of the several types of forest, a summary of the forest and economic conditions of each of the counties covered, and a review of the timber industries in the region. Plans for the conservative management of private and public forest lands are outlined, and recommendations are made for a definite forest policy for Mississippi.

North Carolina Architects.

The fourth annual meeting of the North Carolina Architectural Association at Wilmington last week elected the following officers: President, Frank K. Thompson, Raleigh; vice-president, Hill C. Linthicum, Durham; secretary and treasurer, Franklin Gordon, Charlotte.

It is announced that the Lamb-Fish Lumber Co. has removed its general Southern offices from Memphis, Tenn., to Charleston, Miss., where it operates a large sawmill.

MINING

United Chemical and Nickel Corporation.

The United Chemical and Nickel Corporation of Christiansburg, Va., has incorporated with an authorized capital stock of \$300,000 for the purpose of developing nickel-bearing properties in Montgomery, Floyd and Roanoke counties, Virginia. Its officers are M. H. Tompkins, president; B. M. Hogan, vice-president; J. E. B. Smith, secretary and treasurer, all of Christiansburg. In connection with the enterprise the MANUFACTURERS' RECORD is informed that the company was incorporated for Boston capitalists, who own the properties referred to, and that a meeting will be held about July 10, at which time the company will be reorganized and new officers and directors elected. Plans for development have not been announced.

Mississippi Clays.

The most valuable commercial mineral products of Mississippi thus far developed are its clays, amounting in annual value to about \$900,000. Still these products are by no means equal to the quality and quantity of the clay resources of the State. Considerable improvement has been made in its brick manufacturing, and the manufacture of drain tile has thoroughly demonstrated the suitability of its clays for that

purpose. Such are the opportunities that the State Geological Survey, E. N. Lowe, director, has issued a special bulletin by William N. Logan dealing with the pottery clays of the State, an illustrated and thorough discussion of the important subject.

Coal and coke shipments on the Virginian Railway during May amounted to 73,632 tons of coal and 3715 tons of coke.

COTTONSEED

Cottonseed Meal as Food.

In Texas cottonseed flour is now being used in making bread, rolls, ginger snaps, doughnuts and plum pudding, and experiments in the use of this product of the cotton plant have been made in other States. The recent meeting of the Interstate Cottonseed Crushers' Association was made the occasion for the exploitation of cottonseed meal as food for human beings, and hence a bulletin on that subject by G. S. Fraps, chemist of the Texas agricultural experiment station, will be found of much interest. This bulletin, based upon analyses of cottonseed flour products, discusses the digestible nutrients in several foods, showing that the food value of cottonseed meal is greater than that of beef flank, beef loin, mutton leg, eggs, wheat flour and rice, the wholesomeness of cottonseed flour and its uses. The bulletin concludes as follows:

"Cottonseed meal is a new proposed human food, and very rich in protein. Only experiments and experience can tell us the part that cottonseed meal should take in our diet and whether or not it may prove injurious. In the quantity that it should be used to replace meat, or to reinforce the diet of those whose diet requires reinforcing in protein, it will probably prove wholesome and harmless. It is well worth testing, but we must have full experience before we can have full knowledge.

"Cottonseed flour is richer in protein than meat, and resembles meat more than it does wheat flour, rice, cornmeal or other vegetable food.

"Cottonseed flour could be used as a meat substitute.

"Cottonseed flour, alone or mixed with wheat flour, can be used to prepare bread, ginger cakes, puddings, cakes, etc., which are appetizing.

"We have no reason to believe that cottonseed flour will not be a wholesome human food when used in small amounts to replace meat or to reinforce a diet poor in flesh foods.

"Cottonseed flour, being rich in protein, should not be consumed in such quantity as to make the diet one-sided and too rich in protein. One must be careful not to overeat it.

"Cottonseed meal may be used as a meat substitute in the proportion of one ounce of meal to two of meat.

"Cottonseed meal can be used to reinforce the diet of those whose diet is deficient in protein.

"Cottonseed meal should always be mixed with flour or meal, and with not less than four parts flour or meal to one of cottonseed meal.

"Cottonseed meal may not agree with some people. Every man must learn from his own experience what food agrees with him and what does not.

"Moldy or damaged or inferior cottonseed meal should be avoided, because it may cause sickness.

"Only experience and experiments can tell us the part which cottonseed meal should play in nutrition and under what conditions it may prove unwholesome."

It is reported that J. W. Riggins, former mayor of Waco, will start an 80,000 hog ranch near Amarillo, Texas.

TEXTILES

Adding to Southern Spindles.

During April, May and June, comprising the second quarter of the year, there has been continued progress in the movement that is adding so steadily to Southern spindleage. Eight new companies were organized and eleven existing companies announced plans for enlargements, several of these being of considerable extent. The total for the three months is 82,896 spindles and 2334 looms, an investment of \$2,072,400, including \$1,150,000 for the 46,000 spindles and 502 looms of the new plants, and \$922,400 for the 36,896 spindles and 1832 looms of the enlargements.

These enlargements include the addition of 16,896 spindles and 400 looms to a South Carolina mill, 15,000 spindles and 364 looms to another mill in the same State, and 5000 spindles to a North Carolina mill. The largest new mill is a 13,000-spindle and 300 loom plant in Virginia.

A feature of the quarter was the action of people interested in the Standard Oilcloth Co. of New York in organizing a \$300,000 company to build at Columbus, Ga., a plant for manufacturing the cloth used as the basis of oilcloth, the basis being shipped to the Standard mills for finishing.

The quarter's reports are summarized as follows:

Name.	Location.	Spindles.	Looms.
Alabama.			
Brown Cotton Mills.....	Ragland.....	10,000	120
*W. A. Handley Mfg. Co.....	Hoanoke.....	10,000	120
Georgia.			
Berryton Mills.....	Berryton.....	5,000	....
*Meritas Mills.....	Columbus.....	10,000	170
*Georgia Cotton Mills.....	Dublin.....	....	300
*Manchester Cotton Mills.....	Manchester.....	....	168
North Carolina.			
Roberta Mfg. Co.....	Concord.....	15,000	578
*Young-Hartsell Mills Co.....	Concord.....	....	200
Pauline Mills.....	Kings Mountain.....	....	32
Jennings Cotton Mills.....	Lumberton.....	8,000	....
*Harden Mfg. Co.....	Worth.....	5,000	....
South Carolina.			
*Wylie Mills.....	Chester.....	....	....
Florence Mfg. Co.....	Florence.....	....	....
*Hamrick Mills.....	Gaffney.....	15,000	364
*Manetta Mills.....	Lando.....	....	40
*Calumet Mfg. Co.....	Liberty.....	....	200
*Manchester Cotton Mills.....	Rock Hill.....	....	100
*Simpsonville Cotton Mills.....	Simpsonville.....	16,896	400
Virginia.			
Alta Vista Cotton Mill Co.....	Alta Vista.....	13,000	300
		13,000	300
Total for first quarter of 1910.....		143,500	4,500
Total for second quarter of 1910.....		82,896	2,334
Total for first half of 1910.....		226,396	6,834
* Established mills enlarging.			

The Fairfield Cotton Mills.

The Fairfield Cotton Mills of Winnsboro, S. C., will hold a meeting on July 28 to consider increasing capital stock \$100,000 for additional equipment. This company operates 25,000 ring spindles and 500 broad looms.

For a Knitting Mill.

The Raymond Land Co. of Raymond, Ga., has erected a building for a knitting mill, and wants to correspond with manufacturers of knitting machinery.

Textile Notes.

The Board of Trade, Suffolk, Va., plans the organization of a company to build a cotton mill.

A. W. Samuels of Fort Worth, Tex., proposes the organization of a \$200,000 company to build a cotton mill.

P. A. Whaley, secretary of the Quanah Chamber of Commerce, Quanah, Tex., plans the organization of a \$350,000 company to build a cotton mill, with Eastern parties interested.

Messrs. M. L. Alexander, W. B. Johnson, James E. Humphrey and associates of Ardmore, Okla., propose organizing a \$200,000 company to build the Ardmore cotton mill recently mentioned.

Building Record for June.

As indicated by building reports from a number of Southern and Southwestern cities, building operations for June were active, and in most localities substantial gains have been made as compared with previous months. Building permits were issued in Atlanta during June to an estimated value of \$713,937, which is an increase of \$281,961 as compared with the value for June, 1909. For the first six months of 1910 the value of operations in Atlanta is estimated at \$3,978,828, as compared with a total of \$3,036,111 for the corresponding period of 1909. The report

of the building inspector of Birmingham shows that during the fiscal year ended June 30 the cost of building construction for which permits were issued in that city was estimated at \$2,969,345, as compared with \$2,622,528 for the fiscal year ended June 30, 1909. In June, 1910, permits were issued to a value of \$292,500, which is an increase of nearly \$100,000 as compared with June, 1909. For June the value of construction in Augusta was estimated at \$68,370, an increase of approximately \$32,000 over the corresponding month last year. New structures for which permits were issued in Jacksonville during the month were estimated to cost \$222,900, which indicates much activity in building operations in that city. Permits were issued in Memphis to an estimated value of \$600,000 for June, which is an increase over the corresponding month last year of about \$250,000. For the first six months of 1910 operations were valued at \$3,356,308, as compared with a total of \$1,545,066 for the corresponding period last year. A total of 213 permits was issued in Chattanooga during the month, representing a value of \$475,388. The value of operations in Greenville, S. C., is estimated at \$74,595, and for the first six months of the year at \$220,078. Operations in Tampa were estimated at \$42,206.46. In St. Louis permits were issued for new buildings, alterations and repairs to the value of \$1,884,013, a slight decrease as compared with the record of June, 1909. A total of 160 permits was issued in Dallas during the month, representing a valuation of \$293,435. Since January a total of 1095 permits has been issued, representing a valuation of \$2,203,007. Operations in Oklahoma City were valued at \$956,932, representing a total of 153 permits, of which 116 were for residences. In Norfolk permits were issued to a value of \$217,825 for June, an increase of about \$20,000 as compared with the corresponding month last year.

MECHANICAL**Blazer Patent Spiral Pump.**

Two accompanying illustrations represent the Blazer patent spiral pump, which consists of two spiral impellers working in synchronism in intersecting bores of a case

do not impinge on each other or the spiral housing, being fitted to about .005 of an inch. Slippage is practically eliminated, therefore, and the capacity of the pump is in direct ratio to the speed except inasmuch as it is affected by the friction of the water passing by the pump and through

ting perfect suction, should it be desired to place the pump above the water level or should the water fall below the pump when in operation.

"It is the only pump of the positive pressure class that can be placed within the well casing and will raise water in large volume from any depth in accordance with the power and speed applied and maintain a constant factor of efficiency.

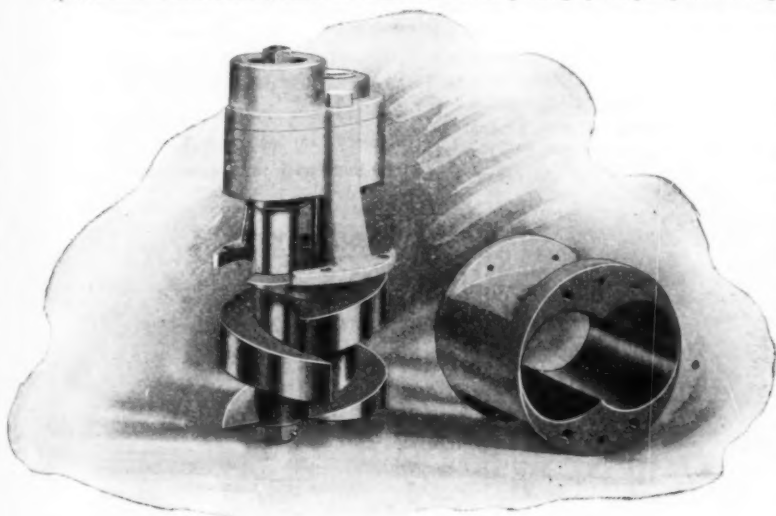
"Installation cost is eliminated beyond lowering pump in position and connecting with power. No pit is required or framework for holding pump and driving mechanism in position—a large item of expense

"Into the other end of each union was screwed a nipple, on the outer end of which was another valve. The union connection was then tightened with an ordinary wrench, steam pressure was admitted by means of the valve next to the main, the outer valve was opened to blow out the air and then closed.

"Close scrutiny was given the union to be sure that there was no leakage of steam.

"The steam pressure was then shut off, the outer valve opened to blow out the steam and the union ring was unscrewed entirely from the brass end.

"This operation was repeated over one

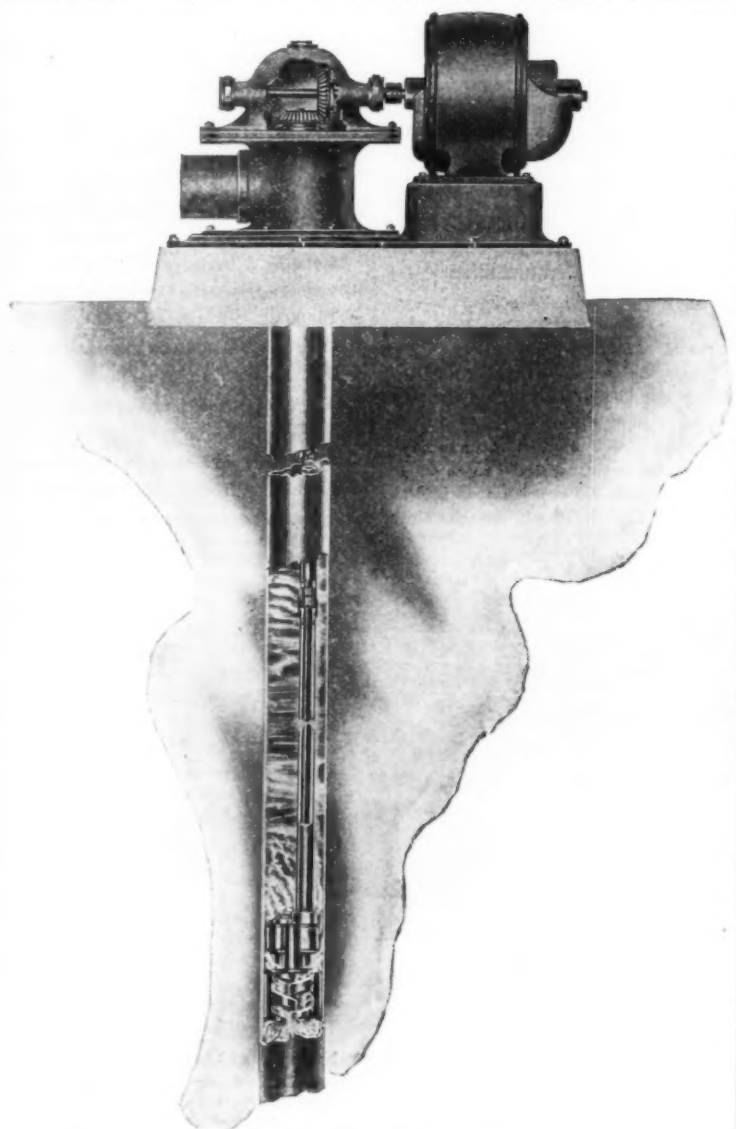


BLAZER SPIRAL PUMP DISMOUNTED.

or housing which carries a support containing a pair of steel cut gears. These gears are connected by shafts which extend through bronze bearings to the interlocking spirals or impellers and rest on

the discharge. The manufacturer of this pump says:

"The pump is suspended in position by a tube attached to the working head, which carries the driving shaft and acts as an



BLAZER PATENT SPIRAL PUMP.

ball bearings of sufficient strength to carry the water load at any pressure for which the pump is designed and guaranteed. By the use of ball or roller bearings friction is practically eliminated, as the impellers

oil reservoir, thereby insuring constant and perfect lubrication. An expansion flange seals the pump in position, thereby preventing any loss by slippage between the spiral housing and casing and permit-



1-INCH KEWANEE UNION.

in the installation of pumps of other classes."

One accompanying view is the eight-inch Blazer pump dismounted, equipped with four-inch pitch impellers. Standard eight-inch pumps have eight-inch pitch impellers, which doubles capacity of four-inch pitch. For high lifts and small volumes (100 to 200 gallons per minute) is recommended four-inch pitch impellers.

Blazer pumps are the invention of A. N. Blazer of Mescalero, N. M., and they are manufactured by the Humphries Manufacturing Co. of Mansfield, O. This company has been making pumping machinery for more than 25 years, and its product is known throughout the world.

The Kewanee Pipe Unions.

Two accompanying illustrations are views of round and octagonal Kewanee pipe unions which were disconnected more than a thousand times. Kewanee unions are manufactured by the National Tube Co. of Pittsburg, which says: "The general question of the durability of a pipe union is of considerable interest to users.

"A pipe union is only used where there is a probability of the joint being disconnected and reconnected. If the idea is simply to make a joint with no possibility of being disconnected a coupling will serve the purpose and be much cheaper than a union.

"When a union joint is used it argues the possibility of being disconnected and reconnected. In the case of an iron-to-iron joint the question of corrosion was always involved, which is eliminated in the case of a brass-to-iron joint.

"The exact number of times that any pipe joint can be disconnected and reconnected depends upon the particular circumstances, but a test recently made with Kewanee unions may be of general interest to union users. The test was as follows:

"Unions were taken as below: One one-inch octagon Kewanee union and one one-and-a-half-inch round Kewanee union. These two were taken from stock with no effort at selection. They have been tested in the following manner:

"Each union was connected by means of a nipple, valve and nipple to a steam line.

thousand times on each of the unions, and during the entire time neither union showed the slightest sign of leakage of steam.

"After the completion of this test each union was taken to the union department, and there subjected to the same test which is received by all new unions, that of 110 pounds air pressure under water.

"Each of these two unions was absolutely tight during this test, not the slightest bubble of air being shown when the union was submerged and subjected to the air pressure of 110 pounds per square inch.

"The point involved in this test is the fact that wherever a union is to be disconnected or reconnected an indefinite



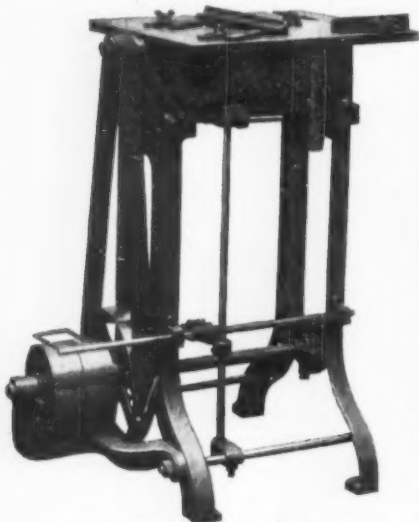
1 1/2-INCH KEWANEE UNION.

number of times, the gasketless type of union is preferable to the gasket type, for in the latter case a gasket must be cut and fitted frequently, involving not only delay (which means labor and money), but also the feature of an uncertain joint."

The "Acme" Metal Saw Table.

A machine which is claimed to cut accurately and speedily sheet, rod and tube brass, copper, fiber, rubber, mother of pearl, printers' furniture, etc., is the "Acme" saw table. The accompanying illustration represents this table, which is constructed entirely of metal, is self-contained, and occupies a floor space of 18x24 inches. Features of merit claimed for it

include the following: Table swings entirely open, or may be set to saw any depth desired; slitting gauge may be set from 0 inches to 12 inches wide; cross-cut gauge will swing from 90 degrees either way to any practical angle; ample bearings for both saw mandrel and countershaft; belt-shifting mechanism is simple, convenient and effective; a removable throat plate allows saws for woodwork up to six inches; center of saw mandrel only one inch be-



"ACME" METAL SAW TABLE.

low surface of table, thus allowing use of small diameter saws; patent wrench for holding saw mandrel from turning while attaching or removing saws.

This machine is manufactured by the Hub Machine Welding & Contracting Co., 621-23 Cherry street, Philadelphia.

Improved Excelsior Machinery.

An accompanying illustration presents a view of the latest model Kline eight-block excelsior machine, manufactured by Lewis T. Kline, Alpena, Mich. Mr. Kline has made a specialty of machinery for excelsior manufacture for nearly 15 years, and has equipped many large plants throughout the United States and Canada, a number of them being in the South.

While there have been many improvements, it is said that the Kline eight-block excelsior machine is close to Mr. Kline's original idea of what an excelsior machine ought to be.

the solid, and fitted with wedges to allow for adjustments and wear. The sliding frame is made of a special quality of steel, with steel crosshead, and the worms, feed rolls and hardened ratchet wheels are made of steel, and cut from the solid on a Brown & Sharpe dividing head to secure accuracy of feed and durability.

The gates, in which are secured the cutting heads, work on top of hard maple slides; the block feeds down to the cutter; the weight of the cutter forms keeps them down on the maple slides, so that there is no danger of any motion to cause the heads to dig into the wood or work to and from the block and make the thick and thin cuts.

For removing blocks or spauls that are left there is a foot and hand lever to part the rolls. By pressing the foot lever the operator can use both hands to handle the block or remove the spaul. There are cross-bars under the rolls to catch pieces that feed off the rolls and prevent them from wedging between the cutter and the feed rolls.

The cutting frames are driven by connection rods attached to cranks on opposite ends of driving shaft. The crankshaft is provided with a driving pulley 34 inches in diameter, 13-inch face, for a 12-inch double leather belt, and should run 250 revolutions.

The knives and spurs are set in heads that are quickly removed from the machine and replaced. These heads are kept on hand set up with knives and spurs, and when those in the machine have become dull the entire eight knives can be changed in 10 minutes or less. Several men can change them in a correspondingly shorter period of time.

The machine is compact, and occupies but little floor space. It is easily attended by one man, who can keep the machine full of blocks and cutting to its fullest capacity.

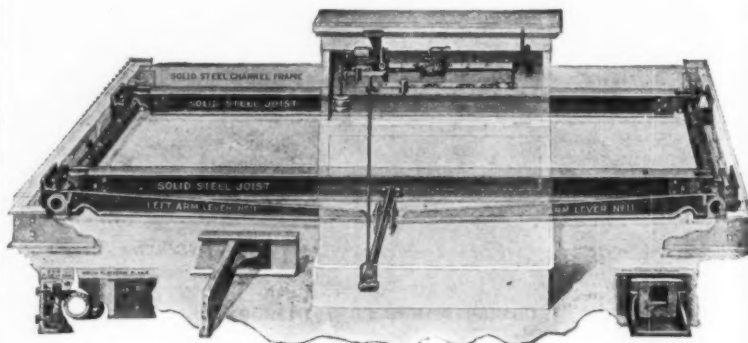
Many kinds of timber are suitable for making excelsior, including basswood, birch, balsam, poplar, soft maple, spruce, hemlock, tamarack, cottonwood, willow, cypress, fir, gum, pine and woods that have a light-colored, straight, tough fiber.

It is claimed that wood for excelsior should be cut into 38 or 55-inch lengths, and split into slabs about five inches thick the full width of the log, and then seasoned in open air until dry. After seasoning thoroughly the bolts are drawn to the mill, cut into 18-inch lengths and trimmed

that does away with the pit which has usually been considered necessary under a scale of large size. An accompanying illustration presents a view of the McDonald scale, which is laid on a steel frame and is shipped from manufacturer to user in such manner that the parts may be assembled and the scale made ready for operation without skilled labor. This scale has been marketed for many years, and it is said that about 15,000 are in daily use in various parts of the country. In its manufacture the bearings are made of high-carbon tool steel, the beam with accurate graduations and the scale thoroughly tested by Government test weights to the full capacity of

of machines in the city is an item of more than passing interest. Since the first machine was brought to Fort Worth up to June, 1909, there were 356 machines used. The present number is between 790 and 800, an increase of more than 125 per cent. This is a daily increase of more than two machines.

The number of automobile agencies in the city in 1909 compared with the present number shows something of the increasing interest in automobiles in Fort Worth. In 1909 there were three agencies in the city.



THE McDONALD PITLESS SCALE.

each machine before leaving the shop. All working parts are solid and strong throughout, and, in addition to the ease with which they are assembled, the scale is entirely portable.

It is claimed to be practical, durable and to have every advantage of careful workmanship and a perfect organization for manufacturing, selling and shipping. A 10-year guaranty clause protects the purchaser from any fault of material or workmanship within the period prescribed.

Fort Worth Automobiles.

Board of Trade,
Fort Worth, Tex., June 22.

Editor Manufacturers' Record:

Automobile tourists were delighted last week with and surprised to find the large number of hard roads leading to the city from every direction. Not only the quantity, but the quality of these roads caused these comments. The road toward Palo Pinto, 106 miles in length, was the object

At present there are 25 agencies, and the number is increasing from month to month.

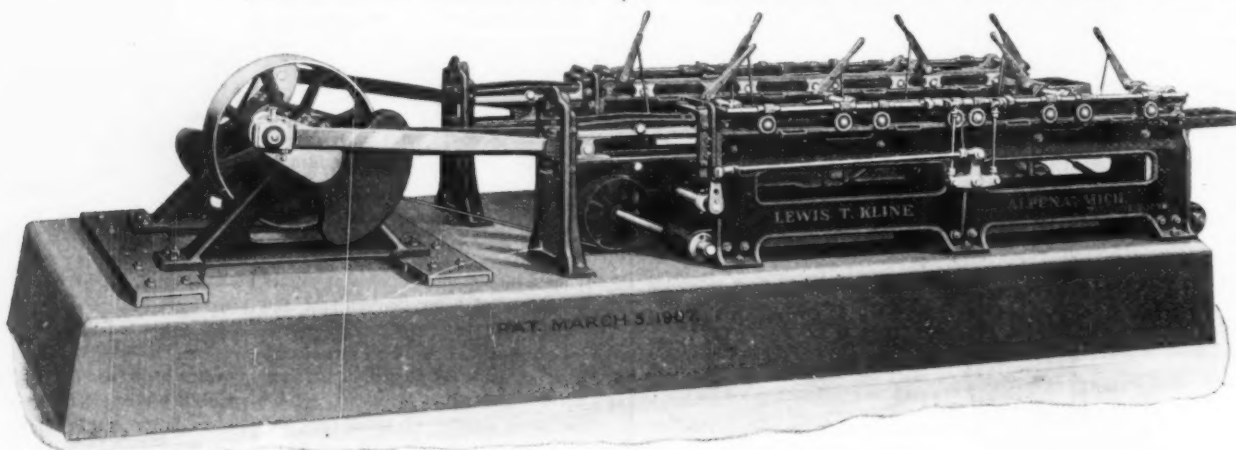
H. E. HERSHEY, Secretary.

Life at Demopolis.

Business League,
Demopolis, Ala., June 18.

Editor Manufacturers' Record:

Demopolis has recently organized a real live Business League. We expect to get busy for real development. We shall begin by building a bridge across the Warrior River at Demopolis, which will mean much to the town. A new \$40,000 postoffice building will be built this summer. A new modern fireproof cotton warehouse is being built. The Bessie Minge Cotton Mills, which have been idle for three years, will probably be opened again in the early fall, and a railroad from the Southern Railway at Demopolis to connect with the Louisville



THE KLINE IMPROVED EIGHT-BLOCK EXCELSIOR MACHINE.

It is economical, and stands the wear and tear without shaking to pieces or being constantly in need of repairs.

There are two sides to the machine, each having a cutting frame or sash, in which are secured four tool heads that hold the knives and spurs, also the feed rolls, conveyor belts, etc.

The gears are cut and hobbled, while the connections are forged and finished out of

square. If the bark has not been removed before piling in the yard, it is barked and passed to the excelsior machine, where it is cut into excelsior, baled and conveyed to the warehouse ready for shipment.

The McDonald Pitless Scale.

The McDonald Brothers Pitless Scale Co., Pleasant Hill, Mo., is manufacturing and marketing a scale for various purposes

of more than one favorable comment. This condition is due largely to the advanced idea held by the ruralists and urbanites alike. The wealthy man in town is not the only owner of automobiles now; farmers in the surrounding country are realizing the uses and benefits to be derived from this means of locomotion, and many are investing in this means of travel.

The phenomenal increase in the number

& Nashville at Linden, 16 miles south of Demopolis, is being contemplated and will probably be built. New residences are going up on every side, and we are taking on a new life generally. The crop prospects for this section are the best in 20 years, and if the present prospects materialize there will be unusual prosperity in this section for the next year.

JESSE B. HEARIN, Secretary.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

The Daily Bulletin of the Manufacturers' Record is published every business day in the year for the purpose of giving the earliest possible news in regard to new industrial, railroad and financial enterprises organized in the South. It is invaluable to contractors, manufacturers, engineers and all others who want to get in touch at the earliest moment with new undertakings or the enlargement of established enterprises. The subscription price is \$25 a year. All advertising contracts in the Manufacturers' Record extending over a period of three months include a subscription for the length of time of the contract to the Daily Bulletin.

BRIDGES, CULVERTS, VIADUCTS

Ky., Louisville.—Louisville & Jeffersonville Bridge Co. will, it is reported, soon award contract for construction of proposed viaduct estimated to cost \$200,000; company is controlled by Cleveland, Cincinnati, Chicago & St. Louis Railway and Chesapeake & Ohio Railway; contract will be let at office of George P. Smith, chief engineer Cleveland, Cincinnati, Chicago & St. Louis Railway, Cincinnati, O.

La., New Iberia.—Iberia, St. Mary & Eastern Railroad, D. A. Genung, chief engineer, New Iberia, will erect two 150-foot-span drawbridges over Bayou Teche.

Md., Cumberland.—Western Maryland Railroad will expend \$1,000,000 to construct bridges on new extension from Cumberland to Connelville, Pa.; structures will be of steel, with concrete foundations; longest bridge will be about three-quarters mile long and 100 feet high, and will be built at Salisbury Junction, west of Meyersdale, Pa.; H. R. Pratt, chief engineer, Continental Trust Bldg., Baltimore, Md., is preparing plans; McClintic-Marshall Construction Co., Pittsburgh, Pa., has contract.

Tex., Dallas.—Dallas County Commissioners accepted plans and specifications by Ira G. Hedrick, Kansas City, Mo., for Dallas-Oak Cliff viaduct; estimated cost \$582,073, exclusive of right of way and western terminal cost. (Mentioned in April.)

Tex., Goliad.—Goliad County Commissioners will probably open bids August 10 for construction of \$7500 county line bridge; plans and specifications may be seen at clerk's offices at Goliad and Cuero, Tex. (See "Machinery Wanted.")

Tex., Houston.—Harris county will construct bridge across Sims Bayou; bids to be opened July 15; John B. Ashe, County Auditor. See "Machinery Wanted.")

W. Va., Grafton.—Taylor county will construct three bridges; bids to be opened July 9; J. I. Thomas, County Road Engineer. (See "Machinery Wanted.")

W. Va., Harrisville.—Ritchie county will construct steel bridge across North Fork of Hughes River, in Clay District; bids opened July 5; W. R. Meservie, Clerk of County Court.

CANNING AND PACKING PLANTS

Tex., Sweetwater.—McSweeney Packing Co. awarded contract to Redfield Construction Co. of New York for erection of packing plant; three stories and basement; separate buildings for power-house and fertilizer plant; daily capacity, 250 cattle, 250 hogs and 500 sheep; install 10-ton ice and cold-storage plant. (Previously mentioned.)

Fla., Orlando.—W. C. Temple, Winter Park, Fla., will organize company and erect \$50,000 packing plant to replace plant recently burned at Winter Park.

CLAYWORKING PLANTS

Okla., Frederick.—Tiling.—Success Realty Co., E. L. Pittman, representative, Oklahoma City, is planning establishment of sub-irrigation tiling plant; cost \$10,000.

Va., Petersburg.—Paving Brick.—Andrews Caoutchouc Brick Co. incorporated with \$100,000 capital stock; M. P. Andrews, president; J. H. Holt, vice-president; F. O. Strallman, secretary-treasurer; M. P. Andrews & Co., Petersburg, architects and engineers in charge of construction of fireproof building; manufacture bricks; also install machinery to manufacture wood-fiber mixture.

COAL MINES AND COKE OVENS

Md., Barton.—Eastern capitalists have, it is reported, leased coal lands from A. B. Shaw and will develop.

Okla., Dewar.—McDonald Coal Co., Anton B. Chapek, president, Enid, Okla., increased capital stock from \$100,000 to \$300,000 and will enlarge plant at Dewar (where it owns 1200 acres of coal land) and increase output; has purchased 100 acres of additional coal land.

Tex., Carmine.—Ledbetter Coal Mine Co. incorporated with \$6000 capital stock by Job Thigpen, W. B. Gantt and George Nott.

Tex., San Antonio.—Calvin Coal Co., previously reported incorporated with \$60,000 capital stock, has elected W. C. Silliman president, Winchester Kelso vice-president, C. S. Austin secretary-treasurer; will develop 453 acres of coal land.

W. Va., Hemphill.—Welch Coal Co. incorporated with \$100,000 capital stock by Harry Bowen of Bramwell, W. Va.; F. J. Baxter and S. A. Daniel of Welch, W. Va., and others.

W. Va., Shinnston.—Virginia & Maryland Coal Corporation has begun proposed improvements at Willard mine, on Mud Lick run; include installation of fan, air compressor and boiler in power-house; capacity of mine, 600 to 800 tons of coal daily; Horner Bros., Clarksburg, W. Va., are engineers; A. Lysle White, superintendent of mine, has general supervision of work.

W. Va., Sullivan.—Wood-Peck Coal Co. (recently reported incorporated with \$35,000 capital stock by J. A. Wood and others) purchased for development coal and timber lands on Piney River in Raleigh county from J. L. Bumgardner and associates.

CONCRETE AND CEMENT PLANTS

Ala., St. Stephens.—Mobile Portland Cement & Coal Co. reports it has begun construction of plant previously detailed; buildings of structural steel, with probably corrugated-iron sides and roof; machinery for

daily output of 3000 barrels Portland cement; purchases made through main office in Van Antwerp Bldg., Mobile, Ala.; O. Gerlach, general manager of construction and operation. (Other facts heretofore stated.)

Mo., Chillicothe.—S. A. Stone proposes erection of concrete product plant.

N. C., Charlotte.—C. W. Requarth, Lancaster, S. C., will manufacture concrete sewer and drain tile, etc. (See "Mining.")

Okla., Fairview.—Fairview Cement Co. incorporated with \$100,000 capital stock by M. E. France, Henry France, John J. Nelson and others.

COTTON COMPRESSES AND GINS

Ala., Decatur.—Jones Cotton Co. will erect compress; daily capacity 800 bales of cotton.

Ga., Unadilla.—King Lumber & Oil Co. will soon begin construction of proposed 8-70 saw cotton gin.

Miss., Charleston.—Charleston Storage & Compress Co. (recently reported incorporated with \$30,000 capital stock by W. G. Harvey, S. J. Baker and others) awarded contract to M. T. Murphree, Monticello, Miss. (present address Charleston), for erection of cotton compress; daily capacity 800 bales; warehouse and compress to cover two acres.

Okla., Eldorado.—Farmers' Union Co-operative Association incorporated with \$20,000 capital stock by J. L. Moore, A. B. Hutchinson, George S. Gardner and others; to operate cotton gins, etc.

S. C., Allendale.—A. A. Richardson is reported to install steam plant in connection with ginnery and lumber plant.

S. C., Sieglerville.—I. J. Hardin is reported to install cotton gin.

Tex., Forney.—Forney Cotton Oil & Ginning Co. incorporated by W. A. Brooks and others. (See "Cottonseed-Oil Mills.")

Tex., San Augustine.—E. E. Jeanes Lumber Co. will erect cotton gin; awarded contract for 4-70 saw gin outfit.

COTTONSEED-OIL MILLS

Ala., Troy.—Standard Chemical & Oil Co. contemplates improvements to plant. (See "Fertilizer Factories.")

Ark., Little Rock.—United Oil Co. organized; W. Y. Foster, president; Wm. Temple, first vice-president; William La Grove, second vice-president; W. F. Bridwell, secretary-treasurer; will acquire cotton-oil mills at Hope, Ashdown and Okolona, Ark., and erect oil mill at Arkadelphia, Ark.

S. C., Allendale.—Allendale Cotton Oil & Fertilizer Co., Chas. Miner, superintendent, will rebuild cottonseed-oil mill previously reported burned. (See "Machinery Wanted.")

Tex., Forney.—Forney Cotton Oil & Ginning Co. incorporated with \$100,000 capital stock by W. A. Brooks, R. P. Penson, M. Spellman and others.

Tex., Galveston.—Anchor Milling Co., H. W. Hildebrand, president, recently noted incorporated with \$25,000 capital stock to continue operation of plant, will manufacture cottonseed cake into meal; will not manufacture cottonseed oil; materials needed for improvements have been purchased.

DRAINAGE AND IRRIGATION

Ark., Helena.—Directors Yellow Banks Drainage District, E. M. Allen, secretary, will construct two drainage ditches of about 700,000 cubic yards excavation; bids to be opened July 15. (See "Machinery Wanted.")

Miss., Valden.—Valden Dredging & Draining Co., A. J. Coleman, secretary, has preliminary surveys by engineers Brannen and Dunn of Valden of Hay's Creek Valley, preparatory to construction of canal which, it is estimated, will drain about 6000 acres. (Recently mentioned.)

ELECTRIC LIGHT AND POWER

Ala., Abbeville.—Abbe Light & Power Co. incorporated with \$60,000 capital stock (not \$6000, as recently stated); J. L. Pollard, president; will open bids not later than August 1 for construction of electric-light plant to transmit 1000 continuous horsepower; details not completed; James R. Hall, Columbus, Ga., engineer in charge.

Ala., Mobile.—Alabama Canning Co. is considering installation of electric-light plant.

Ala., Montgomery.—City Council authorized Gaston Gunter, Mayor, to contract with Montgomery Light & Water Power Co. to furnish electric power to operate water-works.

Ark., Leslie.—City Council granted franchise to J. W. Vaughn and James F. Kiser of Leslie to construct electric-light plant and water-works.

Fla., Tampa.—Tampa Electric Co., J. A. Trawick, manager, purchased site 485x350 feet at foot of Seventh and Oak Aves., on Hillsborough River, for car barn and repair works; building will probably be of reinforced concrete and equipped with auto-sprinkling devices and fire pumps, water to be secured from river; proposed to dredge river and fill in low ground; cost from \$50,000 to \$60,000; plans under consideration at offices of Stone & Webster Engineering Corporation, 147 Milk St., Boston, Mass.

Fla., Tampa.—Tampa Electric Co. will install 750-kilowatt motor generator in West Jackson St. power-house; contract reported awarded.

Ga., Sylva.—City will open bids July 20 for construction of electric-light plant; cost \$11,000; A. B. Lovett, Mayor; J. B. McCrary Company, engineer, Atlanta, Ga. (Recently mentioned. See "Machinery Wanted.")

Ky., Leitchfield.—City contemplates construction of electric-light plant. Address The Mayor.

Ky., Paris.—Paris Gas & Electric Co. incorporated with \$75,000 capital stock by A. M. Dolph, Charles L. Steenberg and Julian R. Howe.

Ky., Whitesburg.—Whitesburg Light & Power Co., J. L. Comann, manager, will establish plant recently noted; cost \$2500; combined generator and exciter; water-power; machinery arranged for.

Mo., Independence.—City Council will issue \$15,000 in general revenue bonds for improvements to electric-light plant; \$9000 for purchase of turbine engine and \$6000 for addition to power-house and street-lighting system.

Okla., Altus.—City awarded contract to J. W. Maxey Company, Scanlan Bldg., Houston, Tex., for improvements to electric-light plant; cost \$35,000.

Okla., Hobart.—Hobart Light & Power Co. will rebuild overhead electric-wire system in residence section.

Okla., Osage.—Osage Land & Development Co., 500 North Broadway, Oklahoma City, Okla., will construct electric-light plant.

S. C., Charleston.—Charleston Consolidated Railway, Gas & Electric Co. increased capital stock from \$1,500,000 to \$2,000,000; reported that improvements will be made.

Tenn., Chattanooga.—Chattanooga & Tennessee River Power Co. engaged Jacobs & Davis, 30 Church St., New York, to complete water-power-electrical plant at Hale's Bar on Tennessee River; 50 per cent. of work to be completed; develop 50,000 horsepower. (Previously detailed.)

Tenn., Cleveland.—J. W. Adams of Chattanooga, Tenn., and associates purchased Cleveland electric-lighting plant for \$25,000; reports state they plan increasing capacity by building dam several hundred feet long and 15 feet high to develop power of Ocoee River.

Tex., Brownsville.—City will improve electric-light plant; cost \$15,000. Address The Mayor.

Tex., Karnes City.—L. R. Spillar, Mayor, is considering installation of electric-light plant.

Tex., Friona.—Citizens' Co-operative Development Co., C. C. Fredericks, president, 11 Carson Bldg., Amarillo, Tex., contemplates construction of electric-light plant.

Tex., San Augustine.—E. E. Jeanes Lumber Co. purchased San Augustine Light & Power Co.'s equipment and franchise, and will rebuild burned power-house.

FERTILIZER FACTORIES

Ala., Troy.—Standard Chemical & Oil Co. contemplates improvements to plant, including installation of generating machinery to provide electricity for operating all machinery except in ice plant, oil and chemical departments.

Ga., Cordele.—Read Phosphate Co. awarded contract for erection of 60-foot addition to main building and other improvements; cost \$10,000.

Ga., Crawford.—Crawford Guano Co., J. A. Roland, president (recently noted to double capital stock and make improvements), will erect two-story mill-construction building; size 40x100 feet; cost \$3000; daily capacity of plant 100 to 150 tons dry-mixed fertilizer. (See "Machinery Wanted.")

Md., St. Michaels.—E. Ney Dodson and others purchased 19-acre site on Miles River for \$3000 and will establish plant to manufacture fertilizer from pickings and refuse of crab-packing plants.

S. C., Chester.—Swift & Co., Chicago, Ill., awarded contract to J. R. Hamrick, Chester, for erection of fertilizer-mixing plant; one story; 20 feet high; 100x300 feet. (Recently mentioned.)

S. C., Orangeburg.—Home Fertilizer Co. incorporated with \$25,000 capital stock by A. M. Salley, R. E. Wannamaker, L. G. Way and others.

FLOUR, FEED AND MEAL MILLS

Ala., Tallahassee.—S. P. Storrs will install flour mill. (See "Machinery Wanted.")

Tex., Ganado.—Ganado Mill & Elevator Co. incorporated with \$50,000 capital stock by N. Strauss, L. Ward, W. W. McCrory and T. N. Mauritz.

Tex., Hico.—J. F. Wieser & Co. incorporated with \$100,000 capital stock by J. F. Wieser, V. F. Wieser, F. Wieser and others; will maintain mill and elevator.

FOUNDRY AND MACHINE PLANTS

Ala., Birmingham.—Iron Works.—Richards-Ingalls Iron Works incorporated with \$20,000 capital stock; J. C. Richards, president; M. J. Gregg, vice-president; Robert I. Ingalls, secretary-treasurer.

Ala., Birmingham.—Brass and Iron Steam Specialties.—Birmingham Valve & Fittings Co. will be organized with \$500,000 capital stock, succeeding Stockholm Pipefitting Co.; has 10-acre site and will erect four or five buildings of reinforced concrete and steel; install machinery for manufacturing iron and brass steam specialties; buildings and machinery to cost about \$300,000; now securing quotations; W. H. Stockholm will probably be president; others interested are A. H. Ford, John L. Kaul, Harry Coffin and W. H. Adams, all of Birmingham; James Weisel and Fred B. Jackson of Louisville, Ky., and Jephtha D. Howe of St. Louis, Mo.

Md., Baltimore.—Copper Works.—Baltimore Copper Smelting & Rolling Co., Fourth Ave. and 5th St., Canton, purchased site on 8th St. for about \$35,000, and proposes to erect addition to plant.

Miss., Biloxi.—Engines.—Dowling Engine Co. has organized with J. C. Clower president, E. J. Dowling secretary and E. C. Tonsmeire treasurer; capital stock, \$100,000; will manufacture headless twin-cylinder engine. (Recently mentioned.)

Mo., Harrisonville.—Pumps, etc.—Harrisonville Pump & Foundry Co., recently reported incorporated by N. P. Withington and others, will establish plant for manufacture of pumps and hard castings; machine shop will be 35x70 feet and foundry 35x60 feet; company is capitalized at \$45,000.

Mo., St. Louis.—Fire Doors, etc.—St. Louis Fire Door & Sheet Metal Works incorporated with \$7500 capital stock by Melvin B. Idarius, Albert Nathan, Maurice Well and others.

Okla., Oklahoma City.—Plows.—Kingman Plow Co. increased capital stock from \$400,000 to \$600,000.

Tenn., Knoxville.—Plows.—Wm. J. Oliver Manufacturing Co. contemplates expenditure of \$200,000 to \$250,000 for extensions and improvements recently noted; malleable-iron foundry to be installed at once; L. Le Van, former general superintendent of Oliver Chilled Plow Works, South Bend, Ind., has become vice-president and will have charge of manufacturing.

Va., Norton.—Foundry.—Norton Car & Foundry Co., W. M. Currier, president, increased capital stock from \$15,000 to \$40,000; purchased site adjoining present plant on which to erect foundry and machine shop for building mine cars and general repair work, including rebuilding industrial locomotives; machinery will include combination power punch and shear, sheet-metal rolls, steam hammer, lathe, shaper, radial drill, etc.

Va., Richmond.—Plows.—Starke's Dixie Plow Works incorporated with \$20,000 capital stock; E. D. Hotchkiss, president; H. M. Starke, secretary-treasurer.

Va., Norfolk.—Iron Pipe.—McWane Tide-water Pipe Co. decided on 12 months' postponement of construction of previously mentioned plant while testing radical improve-

ments; previously reported incorporated, etc., and is branch of Lynchburg Foundry Co., H. E. McWane, president, Lynchburg, Va.

Va., Richmond.—Cars and Locomotives.—Chesapeake & Ohio Equipment Co. chartered with \$1,000,000 capital stock to build and contract for cars and locomotives; George W. Stevens, president; Decatur Axtell, vice-president; J. S. Matthews, secretary; rumors state company is chartered in connection with issuance of equipment bonds of Chesapeake & Ohio Railway. Mr. Stevens telegraphs *Manufacturers' Record* It is not proposed to establish plant at this time.

W. Va., Parkersburg.—Boilers.—Hugh Donovan, Jr., Cairo, Ill., will establish plant for manufacturing boilers; building will be 50x100 feet; Joseph Woods of Parkersburg has contract for erection.

GAS AND OIL DEVELOPMENTS

Ala., Birmingham.—Sipsey Valley Oil & Gas Co., 201-202 Title Guarantee Bldg., organized with \$1,000,000 capital stock; S. P. Marsh, president, Mobile, Ala.; W. J. Wheeler, vice-president; J. B. Dryer, secretary; J. R. Vial, treasurer, each of Birmingham; will develop 1000 acres of oil lands in Fayette gas district.

Ark., Pine Bluff.—Louis Rosenfield of Chicago, Ill., purchased 23,000 acres of timber and cut-over lands in Jefferson and adjoining counties; will develop oil deposits, etc.

Ky., Paintsville.—Fitch Oil & Gas Co. incorporated with \$10,000 capital stock by John C. Mayo, J. W. Turner, W. R. Fitch and Geo. F. Copland.

La., Baton Rouge.—Standard Oil Co., 26 Broadway, New York, is reported to construct second pipe line from Caddo oil field to refinery at Baton Rouge.

Md., Mountain Lake Park.—Northern Natural Gas Co. applied for permit to furnish city with natural gas.

Okla., Bartlesville.—Kan-O-Tex Refining Co. of Langton and Caney, Kans., purchased Meridian Oil Co. property, consisting of 900 acres and 17 producing wells with daily production of 200 barrels of oil; will construct pipe line from refinery to property.

Okla., Stonewall.—Pontotoc Oil & Gas Co. incorporated with \$10,000 capital stock by H. G. Foster, J. H. Thomason, both of Stonewall, and C. B. Tiffin of Stratford, Okla.

Tex., Sandy.—Sandy Creek Oil & Development Co. organized; W. C. Taylor, president; Frank Martin, vice-president; J. A. Foster, secretary-treasurer; D. C. Wheelock, general superintendent and manager.

Tex., Byers.—Company is being organized with \$15,000 capital stock by Geo. W. Byers, J. B. Dunn, R. L. Ligon and others; develop oil deposits; drive test well 2000 to 2500 feet deep.

Tex., Marshall.—Arkansas Natural Gas Co. incorporated with \$5,500,000 capital stock by William Flinn, Joseph Guffey, E. P. Whitcomb, T. N. Barnsdall and others, all of Pittsburg, Pa.; will develop leases in Bowie, Cass, Harrison, Marion and Panola counties and pipe natural gas to various points in Texas; plans to pipe gas from Caddo, La., fields to Little Rock and Hot Springs, Ark. (Mentioned in June.)

Tex., Fort Worth.—County Commissioners granted 25-year franchise to Fort Worth Gas Co. to supply Polytechnic Heights, Arlington Heights, Handley and Intermediate points with natural gas. (Recently noted under "Miscellaneous Factories" to succeed Consumers' Light & Heating Co.)

W. Va., Huntington.—Conservative Oil & Gas Co. incorporated with \$50,000 capital stock by C. A. Warren, G. T. Farrell, M. F. Chevrant and others.

W. Va., Parkersburg.—West Virginia-Oil Gas & Fuel Co., M. Lowe, president, applied for 50-year franchise to furnish natural gas to Williams District, town of Williamstown, Parkersburg District and city of Parkersburg.

ICE AND COLD-STORAGE PLANTS

Mo., Portageville.—Portageville Storage Co., Goah Barnes, president, will install two-ton refrigerating plant; order placed.

Tex., Cooper.—Hicks Ice Co. of Marshall, Tex., will establish ice plant.

Tex., Terrell.—Hicks Ice Co. of Marshall, Tex., will erect 100-ton ice plant.

Tex., Weimar.—J. O. Boettcher will erect \$10,000 ice and cold-storage plant.

IRON AND STEEL PLANTS

Ala., Holt.—Iron Furnace.—Central Iron & Coal Co., 37 Wall St., New York, has blown out furnace for relining.

Ala., North Birmingham.—Iron Furnace.—Sloss-Sheffield Steel & Iron Co., Woodward Bldg., Birmingham, Ala., has blown in iron furnace at North Birmingham.

LAND DEVELOPMENTS

Ala., Birmingham.—Reliance Development Co. incorporated with \$5000 capital stock; Geo. A. Blinn, Jr., president; J. W. Donnelly, vice-president; Bertram Jacobs, secretary-treasurer.

Ark., Arkadelphia.—Arkadelphia Land Co. organized with \$100,000 capital stock by T. N. Wilson, Josiah Hardage, Joe Calloway and others.

D. C., Washington.—North Mt. Vernon Land Co. incorporated with \$30,000 capital stock; C. D. Fowler, 508 F St. N. W., president; H. B. Moulton, Washington Loan & Trust Bldg., secretary.

D. C., Washington.—North Mt. Vernon Land Co. incorporated with \$50,000 capital stock; C. D. Fowler, 508 F St. N. W., president; H. B. Moulton, Washington Loan & Trust Bldg., secretary.

Fla., Hastings.—Hastings Development Co. incorporated with \$10,000 capital stock; C. A. Dupont, president; G. W. Waller, secretary-treasurer.

Fla., Manatee.—Mrs. Potter Palmer, Chicago, Ill., purchased 75,000 to 100,000 acres of land in Manatee county for \$300,000; will develop and colonize; management of J. H. Lord, Marquette Bldg., Chicago, Ill.

Fla., Tampa.—Tampa Equity Investment Co. organized with \$50,000 capital stock; Arthur W. Cuscaden, president; Tucker Savage, vice-president; Thos. J. O'Neil, secretary; C. L. Knight, treasurer.

Fla., Tampa.—Wahnetta Farms Co. incorporated with \$10,000 capital stock; William G. Booren, president, Tampa; Robert F. Carr, vice-president, Cumberland Gap, Tenn.; Wallace T. White, secretary-treasurer, Tampa.

Ga., Savannah.—Rauzin Investment Co. incorporated with \$5000 capital stock by Aaron and Joel Rauzin of Savannah and Meyer and Amelia Rauzin of Atlanta, Ga.

Ga., Waycross.—Homestead Pecan & Nursery Co. of Wheeling, W. Va., organized; Geo. Rentsch, president; A. L. Meyer, vice-president; J. H. Devore, treasurer; A. Clarke Snedeker, secretary-general manager; purchased 500 acres of land between Waycross and Blackshear and will develop pecan orchards; planning to subdivide into five-acre tracts.

Ga., Waycross.—Georgia-Florida Land Co. incorporated with \$100,000 capital stock by S. Lee Elliott, E. D. Nix, O. B. Strunk and others, all of St. Louis, Mo.; will develop 140,000 acres of land recently reported purchased by Mr. Elliott and associates for colonization.

Md., Round Bay (not a postoffice).—Walter C. Piper, The Marlborough; N. P. Chapman, 806 American Bldg., and E. X. Le Seuer, all of Baltimore, Md., purchased Round Bay resort property, containing 115 acres, for \$25,000; will subdivide into building sites and develop.

N. C., Montreat.—Blue Ridge Association for Christian Conferences is planning to develop 880 acres of land as permanent home for Young Men's Christian Association, Young Women's Christian Association and Young People's Missionary Movement; erect auditorium, cottages, etc.; establish sawmill to cut hardwood timber for erection of buildings; C. H. Hobbs, chairman of business committee, Asheville, N. C.

Tenn., Chattanooga.—Ward Land Co. incorporated with \$40,000 capital stock by M. H. Ward, C. M. Preston, William Elliott and others.

Tenn., Chattanooga.—Mendel Park Land & Improvement Co. incorporated with \$20,000 capital stock by R. B. Cooke, J. F. Johnson, Herbert Bushnell and others.

Tenn., Johnson City.—Johnson City Development Co., Crumley Bldg., organized with \$100,000 capital stock; Z. A. Robertson, president; S. W. Wilson, vice-president; Stanyarne Little, secretary-treasurer; R. S. Boyd, general manager; purchased for development 100 acres of land; will subdivide, grade streets, construct sidewalks, erect residences, etc.

Tex., Beaumont.—Beaumont Orange & Fig Co. incorporated with \$15,000 capital stock by J. W. Wilkinson, T. W. Larkin and J. D. Wilkerson.

Tex., Dilley.—W. J. Armstrong and associates of San Antonio, Tex., will develop 4000 acres of land 15 miles west of Dilley; will subdivide into farming districts; drill artesian well; Ehrenbork & Johnson, engineers in charge, 515 Gibbs Bldg., San Antonio, Tex.

Tex., Friona.—Citizens' Co-operative Devel-

opment Co., recently reported incorporated with \$20,000 capital stock, has elected C. C. Fredericks president, R. H. Ames vice-president, S. E. Flash secretary-treasurer; will develop manufacturing section; contemplates erection of broom factory, water-works, sewerage and electric-light plants; main office, 11 Carson Bldg., Amarillo, Tex.

Tex., Houston.—Houston Investment Co. incorporated with \$20,000 capital stock by R. F. Crow, W. C. Crow and Charles C. McRae.

Tex., Houston.—Texas Town Lot Co. incorporated with \$20,000 capital stock by Thornwell Fay, Edwin B. Parker and M. A. Westcott.

Tex., Paris.—Bogota Townsite Co. incorporated with \$10,000 capital stock by M. L. Igo, S. W. Williams, H. P. Mayor and R. F. Scott.

Tex., San Antonio.—A. J. Swearingen and associates purchased Burris Ranch, containing 435 acres, for \$100,000 and will cultivate; will irrigate portion.

Tex., San Antonio.—Travis E. Jones purchased third interest in tract of 21 acres of land in Washington Heights for \$9112.50 and will develop; will construct boulevard 300 feet wide; parkway of tropical plants; macadamize streets; construct cement sidewalks, etc.

Tex., Woodward.—M. Bargas Company, San Antonio, Tex., purchased townsite of Woodward and will further develop for resort; install sewerage system, water-works, electric lights and other public utilities; erect \$20,000 hotel and \$5000 bathhouse; later enlarge bottling works; contemplates construction of pipe line to Aransas Pass, Tex., to convey water from vichy lake.

Va., Roanoke.—Hiawatha Corporation incorporated with \$10,000 capital stock; J. E. Talbott, president; J. Botts, vice-president; J. F. Lee, secretary-treasurer.

LUMBER MANUFACTURING

Ala., Vinegar Bend.—Vinegar Bend Lumber Co., N. E. Turner, president, will repair plant recently damaged by explosion; has placed order for machinery.

Ark., Pine Bluff.—Louis Rosenfield, Chicago, Ill., purchased 23,000 acres of timber land in Jefferson and adjoining counties; purchase price, \$160,000.

Ga., Augusta.—E. L. Yoder, Pittsburg, Pa., is considering establishment of veneer factory; F. J. Wells, representative of Mr. Yoder, submitted proposition to Chamber of Commerce.

Ga., Savannah.—Mutual Land & Timber Co. incorporated with \$25,000 capital stock by J. W. Motte, W. W. Wilder, W. K. Smith and others.

Ky., Lincoln County.—Thomas Popp, Charleston, W. Va., is negotiating for timber and coal land.

Ky., Louisville.—Southern Planing Mill Co. incorporated with \$60,000 capital stock by Emile Anderson, Reinhold Anderson and Charles Anderson.

La., Quitman.—Southern Lumber & Timber Co. organized with \$50,000 capital stock to manufacture rough pine and oak timber for railroad and heavy construction work; V. I. McCarty is president and treasurer, and W. J. Chastain vice-president, both of Shreveport, La., where offices will be located.

La., Concordia Parish.—E. K. Jeffries Lumber Co., Natchez Hotel, Natchez, Miss., is completing arrangements for proposed development of timber land in Concordia parish; five-mile railroad from Mississippi River to timber; will erect five mills in Louisiana and handle output of 75 mills in Mississippi.

La., Ruston.—G. M. Lomax Lumber Co. will rebuild planing mill reported burned; install two planers, shafting, pulleys and belting.

Miss., Brookhaven.—Central Lumber Co., recently noted to increase capital stock to \$190,000, will erect \$10,000 sawmill and \$6000 drykiln; install single-band sawmill and drykiln machinery; manufacture yellow pine lumber. Address proposals to S. Elloroten.

N. C., Elizabeth City.—L. L. Hayman will establish saw and planing mill, erecting 37x76-foot building; ordinary and mill construction; install machinery. (See "Machinery Wanted.")

N. C., Montreat.—Blue Ridge Association for Christian Conferences and Training will erect sawmill to cut hardwood lumber for erection of various buildings; estimated 1,000,000 feet available; cutting under direction of C. H. Hobbs, Asheville, N. C. (See "Land Developments.")

N. C., Whittier.—Quiett Manufacturing Co. incorporated with \$12,000 capital stock by W. T. Mason, William Quiett and J. E. Coburn.

Okla., Guthrie.—F. E. Cragin Lumber Co.

Incorporated with \$50,000 capital stock by F. E. and Harry Cragin, W. F. and Ida Field and E. L. Reeder.

S. C., Allendale.—A. A. Richardson is reported to install steam plant in connection with lumber plant and gin. (See "Cotton Compresses and Gins.")

S. C., Allendale.—A. A. Metz is reported to establish planing mill; manufacture flooring, ceiling, etc.

Tenn., Chattanooga.—Evans-Atchison Lumber Co. incorporated with \$15,000 capital stock by M. H. Ward, R. E. Evans, A. C. Foust and others.

Tenn., Nashville.—W. J. Cude Land & Lumber Co. incorporated with \$50,000 capital stock by W. J. Cude, A. B. Ransom, John W. Love and others.

Texas.—W. R. Pickering Lumber Co. of Kansas City, Mo., is reported as to build large mill on timber lands in East Texas; company telegraphs Manufacturers' Record it does not anticipate building this mill in near future, and writes it has not considered developing its Texas timber at anything like an early date.

Tex., Honey Island.—T. J. Williams, president of Williams Lumber Co., San Antonio, Tex., purchased 20,000,000 feet of standing timber for \$20,000, and will build hardwood mill with daily capacity of 35,000 feet of lumber.

Va., Graham.—Welch Lumber Co., Welch, W. Va., awarded contract to J. N. Doss, Welch, W. Va., for erection of two buildings; one for planing mill and storage, 50x100 feet; one rough lumber shed, 22x150 feet; corrugated-iron roof and sides; electric lighting; cost \$2500. (Recently noted under "Bank and Office Buildings." See "Machinery Wanted.")

Va., Rapidan.—Rapidan Land & Timber Co. chartered with \$200,000 capital stock; W. H. Cobb, president; J. H. Fout, treasurer, both of Elkins, W. Va.; S. A. Moore, secretary, of Philippi, W. Va.

W. Va., Dobbin.—Parsons Pulp & Lumber Co. of Parsons, W. Va., will enlarge Dobbin sawmill; add 48 feet to length and 10 feet to width; install 500 horse-power twin engine and other machinery; daily output to be 100,000 feet of lumber.

W. Va., Sullivan.—Wood-Peck Coal Co. (recently reported incorporated by J. A. Wood and others) will install sawmill for developing poplar, oak and other varieties of timber. (See "Coal Mines and Coke Ovens.")

METAL-WORKING PLANTS

Md., Baltimore.—Cans.—Southern Can Co., 2203 Boston St., awarded contract to John Cowan, 106 West Madison St., Baltimore, for warehouse and lithographing building at Lancaster and Wolfe Sts.; three stories; brick; 118x96 feet; cost \$41,500; plans by Wyatt & Nolting, Keyser Bldg., Baltimore. (Recently mentioned.)

MINING

Ala., Birmingham.—Limestone.—Alabama Stone & Ore Co., W. G. Robinson, president, will operate limestone quarry; daily output 300 to 300 tons limestone; equipment mainly purchased. (See "Machinery Wanted.")

Ala., Birmingham.—Iron, etc.—Empire Fuel & Iron Co. increased capital stock from \$10,000 to \$20,000.

Ga., Atlanta.—Onyx.—Crystal Onyx Co. incorporated with \$200,000 capital stock by B. W. Torrence, W. J. Campbell, E. C. Thrash and R. F. Strickland.

Ga., Fish.—Iron.—Pulaski Iron Co. of Pulaski, Va., purchased 140 acres of land near Fish and will develop iron deposits.

Ky., Glasgow Junction.—Onyx.—Southern Onyx Co. of Delaware, Thomas A. Cromwell of Boston, Mass., representative, purchased land near Glasgow Junction and will develop, taking out onyx blocks in rough state; F. D. Gallupe, general manager, Boston, Mass.

Ky., Crittenden.—Fluor-spar.—Eclipse Mining Co., Louisville, Ky., will develop fluor-spar deposits; sunk shaft 115 feet, with three entries into spar.

Mo., Joplin.—Zinc.—Grenier & Largent will develop zinc deposits on 20-acre lease of Caffe land.

Mo., Sarcosie.—Lead and Zinc.—Barber & Snarley of Aurora, Mo., leased tract of Optimo ground and will develop.

Mo., Webb City.—Lead and Zinc.—Maggie G. Mining Co., R. F. D. No. 1, Box 170, recently reported incorporated (under Joplin, Mo.) with \$40,000 capital stock, will develop 26½ acres; daily capacity, 200 tons; machinery on ground; J. J. Gehlhausen, president, Box 171, Joplin; E. B. Schilling, secretary-treasurer.

N. C., Charlotte.—Stone.—C. W. Requarth, Lancaster, S. C., purchased half interest in Charlotte Quarry Co.; will organize new company with \$50,000 capital stock, enlarge facilities for crushing and furnishing stone; purchased and will install machinery for manufacturing concrete products of stone dust and cement, including sewer and drain tile, curbing, etc.

N. C., Franklin.—Clay.—Gurney Clay Co. incorporated with \$50,000 capital stock by J. W. Gurney of Franklin, D. O. Campbell of Saurville, Maine, and others.

Tex., Riverside.—Rock.—H. Graham of Houston, Tex., considers reopening rock quarry.

Tex., Smithville.—Gravel.—Smithville Sand & Gravel Co. will install plant for extracting sand and gravel from bed of Colorado River.

Va., Herndon.—Trap Rock.—E. L. Detwiler, C. M. Lawrence and S. A. Hershberger purchased 75 acres of Belmont Park property containing trap-rock deposits; plan organization of company to develop; install steam rock crusher and quarry stone for roads.

Va., Christiansburg.—Nickel.—United Chemical and Nickel Corporation chartered with \$300,000 capital stock; M. H. Tompkins, president; latter represents Boston parties who are chartering this company to develop nickel-bearing properties.

Va., Miles (not a postoffice).—Rock.—Vaughan Construction Co., Roanoke, Va., will take over and operate quarry and plant on Little River to furnish Virginia Iron, Coal & Coke Co. with fluxing rock; will operate exclusively with electric power furnished by Radford (Va.) Water Power Co.; W. C. Hodge, master carpenter, Roanoke, will erect houses for workmen; lighted by electricity.

MISCELLANEOUS CONSTRUCTION

Ala., Mobile.—Dredging.—City Council authorized Pat Lyons, Mayor, to invite bids on dredging 24-foot river depth along wharves from Dauphin St. to One-Mile Creek.

Fla., Tampa.—Seawall.—Tampa Electric Co. will construct reinforced concrete seawall along river and in front of its property; wall will be nine feet thick at base and five feet at top.

La., New Orleans.—Seawall.—Committee on Streets and Landings of City Council approved ordinance directing City Engineer W. J. Hardee to prepare plans and specifications for concrete seawall to be constructed at West End, and approved plans and specifications for filling in with earth, dredged from Lake Pontchartrain, area included within seawall and existing revetment levee; City Comptroller is directed to advertise for bids.

La., New Orleans.—Earthwork.—Bids will be opened August 1 for construction of 334,000 cubic yards of earthwork in Lower Tensas Levee District; H. Burgess, Major, Engineers, U. S. Engineer Office, 338 St. Charles Ave. (See "Machinery Wanted.")

Miss., Natchez.—Levee.—Government awarded contracts for construction of levee near Buck Ridge, La., in three sections: I. R. Bobbitt, Natchez, 125,000 yards; R. T. Clarke, Natchez, 130,000 yards; Donovan & Daley, Lake Providence, La., 64,000 yards; total, 319,000 yards.

MISCELLANEOUS ENTERPRISES

Ala., Birmingham.—Automobiles.—Drennen Motor Car Co. incorporated with \$5000 capital stock; D. M. Drennen, president; W. M. Drennen, vice-president; F. M. Drennen, secretary; H. A. Drennen, treasurer and general manager.

Ala., Birmingham.—Crematories.—City will vote August 22 on \$150,000 bond issue for construction of four crematories, each with capacity of 30 tons; Frank P. O'Brien, Mayor.

Ala., Birmingham.—Contracting.—Standard Contracting Co. incorporated with \$7500 capital stock; Allen J. Krebs, president and treasurer; Geo. A. Gattis, vice-president and general manager; H. M. Thewatt, secretary.

Ala., Birmingham.—Paving.—Alabama Paving Co. incorporated; B. A. Inglis, president; W. L. Inglis, vice-president; J. R. Copeland, secretary-treasurer.

Ala., Birmingham.—Publishing.—Lawrence County Publishers' Corporation chartered with \$25,000 capital stock; Brooks Lawrence, president and treasurer; Felix I. Tarrant, vice-president; James Weisel, secretary; publish weekly paper—Saturday Review.

Ark., Argenta.—Grain.—Farmers' Grain Co. incorporated with \$10,000 capital stock by Walter Brown, C. E. Hayes and James Thomas.

Ark., Argenta.—Grain.—Argenta Grain Co. incorporated with \$10,000 capital stock by C. E. Hayes, W. E. Bass and James Thomas.

Fla., Jacksonville.—Duval-Schub Concrete Construction Co., 307 Atlantic National Bank Bldg., organized; J. N. Coons, president; Stockton Broome, vice-president; C. S. Cowenhoven, secretary-treasurer; will erect concrete houses by pouring system, using steel forms.

Fla., Key West.—Steam Laundry.—Eureka Steam Laundry Co. incorporated with \$10,000 capital stock; Wm. A. Perrell, president; Stephen E. Law, secretary-treasurer.

Ga., Dublin.—Steamboat Line.—Oconee Steamboat Co. organized; E. Smith, president; J. S. Fritchett, general manager; operate steamboats on Oconee River.

Ga., Rome.—Garage.—Etowah Garage incorporated with \$2000 capital stock by J. H. King, Carey J. King and others.

Ky., Bowling Green.—Stone Crushing.—Kentucky & Tennessee Stone Co. organized to utilize waste from quarries of Bowling Green White Stone Co.; will install crushing machinery.

Ky., Pikeville.—Printing.—Pikeville Printing Co. incorporated with \$3000 capital stock by James A. Scott, J. W. Ford and C. C. Bowles.

Md., Baltimore.—Laundry.—Excellent Laundry Co. incorporated by William N. Slack, 1228 John St.; Louis Armstrong and Gordon Bonnette.

Md., Baltimore.—Steam Laundry.—Baltimore Antiseptic Laundry Co., 1533 Myrtle Ave., purchased site 15x90 feet for addition to plant.

Mo., Kansas City.—Lime and Stone.—Phoenix Stone & Lime Co. increased capital stock from \$60,000 to \$125,000.

N. C., Lenoir.—Steam Laundry.—I. F. Lineberger of Lincoln, N. C., and E. I. Hollingsworth of Asheville, N. C., leased space in Harshaw Bldg. and will establish steam laundry.

Okla., Pawnee.—Hardware, etc.—Pawnee Hardware & Furniture Co. incorporated with \$20,000 capital stock by William Brington of Pawnee, Floyd Thompson of Oklahoma City and others.

S. C., Columbia.—Automobiles.—Rodney Automobile Co. incorporated with \$10,000 capital stock by J. R. Rodney and J. J. Cain.

Tenn., Gallatin.—Hardware.—Parrott Hardware Co. incorporated with \$200,000 capital stock by J. A. Summers, H. R. Parrott, J. P. Summers and others.

Tenn., Memphis.—Construction.—Valley Construction Co. incorporated with \$30,000 capital stock by J. W. Falls, Charles Lortians, Guy P. Long and E. P. Lemaster.

Tex., Dallas.—Distilled Water.—Dallas Distilled Water Co. is name of company recently noted established by H. L. Dreyer, Denver, Col.; awarded contract to Mr. Lowry, 126 9th St., Dallas, for erection of 25x50 corrugated-iron-roofed building; shed construction; machinery mainly purchased; daily capacity, 500 to 1000 gallons distilled water; H. L. Dreyer, president; J. Hale, vice-president. (See "Machinery Wanted.")

Tex., Hico.—Grain Elevator.—J. F. Wilson & Co. incorporated by J. F. Wieser and others. (See "Flour, Feed and Meal Mills.")

Tex., Houston.—Publishing.—Rein & Sons Co. incorporated with \$50,000 capital stock by Charles M. Rein, Charles M. Rein, Jr., John H. Kirby and others.

Tex., Lockney.—Grain Elevator.—Cobb & Elliot Grain Co. has plans by Goodwin & Maxey, Plainview, Tex., for elevator recently noted; 24x26 feet; frame; roofed with galvanized-iron sided shiplap and rubberoid roofing; day's work; machinery purchased; daily capacity 10,000 bushels of grain.

Va., Norfolk.—Printing.—Atlantic Coast Printing Co. incorporated with \$30,000 capital stock; R. E. Reed, president; S. J. Proctor, vice-president; W. T. Saunders, treasurer; A. W. McWhorter, secretary.

Va., Portsmouth.—Drydock.—Navy Department, Geo. von L. Meyer, Secretary of Navy, Washington, D. C., will probably name July 15 as date of opening bids for proposed extension of Norfolk Navy-yard drydock No. 3; specifications will allow 14 months for completion and provide that present dock will not be out of commission more than four months; dock as extended will be 732 feet long at coping of level.

Va., Richmond.—Engineering.—Contractors' Engineering Co. incorporated with \$5000 capital stock; J. H. Mitchell, president; R. M. Brander, vice-president; N. T. Mosby, secretary-treasurer.

MISCELLANEOUS FACTORIES

Ala., Birmingham.—Oil Refinery.—Texas Company, Houston, Tex., will, it is reported, erect oil mill to manufacture refined oil;

steel construction with reinforced concrete; fireproof; cost \$75,000.

Ala., Birmingham.—Pneumatic Jacks.—Pneumatic Jack Co., Lewis J. Dittmore, secretary-treasurer, Louisville, Ky., contemplates establishment of plant; cost \$50,000.

Ala., Thorsby.—Dental Instruments, etc.—Northrup Manufacturing & Supply Co. is name of company recently noted established by C. E. Northrup for manufacture of dental instruments and specialties; C. E. Northrup, president; C. E. Northrup, Jr., vice-president; D. M. Smithson, secretary-treasurer. (See "Machinery Wanted.")

Fla., Mangonia.—Boats.—Mangonia Boat, Marine & Storage Co. incorporated with \$10,000 capital stock; J. E. Liddy, president, Mangonia; Wm. E. Gale, vice-president, West Palm Beach, Fla.; George A. Gale, secretary-treasurer and manager, Mangonia.

Fla., Panama City.—Bottling.—Ray Bottling Works incorporated with \$10,500 capital stock; W. C. Vickery president; L. E. Vickery, secretary-treasurer.

Fla., Tampa.—Refining.—Gulf Refining Co., Pittsburg, Pa., will rebuild warehouses, office and engine-rooms of plant reported burned; loss \$10,000.

Ga., Atlanta.—Heel Spring.—Sanitary Heel Spring Co. incorporated with \$10,000 capital stock by Rollin H. Kimball, E. P. Chivers and John C. Kirkpatrick.

Ga., Atlanta.—Candles.—Norris, Inc., 28 South Forsyth St. (recently noted chartered with \$10,000 capital stock), will manufacture fine candles (not beverages as recently reported); W. J. Lowenstein, president; F. E. Lowenstein, vice-president; M. M. Lowenstein, secretary-treasurer; A. L. Norris, second vice-president and general manager; will not erect building at present.

Ga., Atlanta.—Agricultural Implements.—McKinney Traction Cultivator Co. organized; W. J. McKinney, president; will establish plant to manufacture agricultural machinery.

Ga., Atlanta.—Beverages, etc.—Snap-Life Co. incorporated with \$75,000 capital stock by J. W. Barwick, James K. Hines and others.

Ga., Atlanta.—Sash Weights.—Atlanta Sash Weight and Machine Works, 833 East Fair St., will erect factory with capacity of 20 tons of sash weight daily.

Ga., Raymond.—Gloves.—Raymond Land Co. has erected building for glove factory, and contemplates installing necessary machinery. (See "Machinery Wanted.")

Ky., Kosmosdale.—Lime.—Kentucky Carbonate of Lime Co. incorporated with \$2000 capital stock by E. H. Powell, L. F. Withers and A. B. Wood.

Ky., Louisville.—Dental Supplies.—Birmingham Dental Laboratory & Manufacturing Co. incorporated with \$10,000 capital stock by T. M. Crutcher, D. Hoke and H. T. Gill.

Ky., Louisville.—Automobiles.—American Automobile Manufacturing Co., Beatrice, Neb., will, it is reported, establish automobile factory to most \$125,000.

La., Bossier.—Bain Peanut Co., Wakefield, Va., will establish plant; erect \$75,000 building and several storehouses to cost \$5000 to \$10,000 each. (Previously noted under Shreveport, La.)

Ky., Whitesburg.—Bottling.—Eagle Bottling Co., Felix G. Fields, manager, organized to manufacture beverages.

La., Shreveport.—Oil Refinery.—Texas Company, Houston, Tex., is reported to establish oil refinery on Grigsby's Island near Shreveport; plans 50 tanks, holding 37,500 gallons each; daily capacity, 30,000 gallons of refined oil.

La., Crowley.—Rice Cooker.—Board of Trade is promoting establishment of plant to manufacture patented rice cooker invented by F. D. Calkins, Welsh, La.

La., Crowley.—Sacker and Scales.—R. H. Kleisel, miller at Crowley Rice Mill, contemplates establishment of plant to manufacture patented scale and device for filling small sacks with rice.

Md., Baltimore.—Extracts.—McCormick & Co., 105-19 Concord St., will erect addition to plant.

Md., Baltimore.—Shirts.—Henry Myer & Co., 3001-9 Elm Ave., have plans by F. E. Beall, 213 St. Paul St., Baltimore, for addition to plant; two stories and basement; 33x112 feet; cost \$9000.

Md., Baltimore.—Medicine.—Akerue Medicine Co. incorporated by Harry E. Parkhurst, 55 Gunther Bldg., Walter C. Parkhurst and Marian Parkhurst.

Md., Cumberland.—Glass.—Wellington Glass Co. will make improvements and increase capacity from 11 to 14 pots.

Md., Cumberland.—Glass.—Potomac Glass Works will install new setting of pots.

Md., Fairfield—Asphalt Products.—Imperious Products Co., main office 213 St. Paul St., Baltimore, Md., will rebuild portion of plant reported burned; loss \$25,000.

Mo., Kansas City—Disinfectant, etc.—Radium Spray Co., 1235 Walnut St. (recently reported incorporated with \$8000 capital stock), will manufacture disinfectant, dust layer, etc.; A. G. Parker, president; J. S. Wolverton, vice-president; Geo. W. Wilhelm, secretary-treasurer.

Mo., St. Louis—Storage Batteries.—Universal Storage Battery & Supply Co. incorporated with \$100,000 capital stock by H. F. A. Spiegelberg, Paul L. Goodale, Roxa Goodale and others.

Mo., St. Louis—Automobiles, Motor Cars.—Moon Motor Car Co. will erect automobile factory; four stories; floor space, six acres; fireproof construction.

Mo., St. Louis—Bottle-washing Machines.—Chaswill Manufacturing Co. incorporated with \$18,000 capital stock by Robert Heitz, Charles Wende and others.

N. C., Asheville—Toilet Articles.—Talcum Puff Co. increased capital stock from \$100,000 to \$250,000.

N. C., Greensboro—Shoes.—W. S. Lyon is interested in establishment of shoe factory by Boston firm.

N. C., Winston-Salem—Tobacco.—Brown & Williamson Tobacco Co. increased capital stock from \$400,000 to \$550,000.

Okla., Avant—Glass.—American Glass Co. incorporated with \$35,000 capital stock by James E. Dunn of Oklahoma City, Okla., James A. Du Bose of Anniston, Ala., and Maurice Schwartz of Peru, Kan.

Okla., Oklahoma City—Vulcanizing.—Oklahoma Vulcanizing Co. incorporated with \$2000 capital stock by F. B. Frank, S. M. and J. P. Fuesler.

Okla., Oklahoma City—Automobiles.—Pioneer Automobile Co., W. R. Roberts, president, El Reno, Okla., is considering establishment of automobile factory with capital stock of \$50,000.

Okla., Okmulgee—Glass.—Wheelock & Call, Anderson, Ind., will establish glass factory.

S. C., Columbia—Crushed Stone.—Weston & Brooker have placed orders for complete equipment for proposed 100-ton crusher plant, to be located on Atlantic Coast Line Railway; operation by July 15; estimated daily capacity five carloads.

S. C., Chester—Automobiles.—D. P. Crosby and F. M. Hough organized company to establish plant to manufacture automobiles.

Tenn., Memphis—Pearl-button Machinery.—W. S. Watson of the Memphis Button Works plans organization of company to build plant for manufacturing pearl-button machinery.

Tenn., Memphis—Pearl Buttons.—W. S. Watson of the Memphis Button Works plans organization of two companies, capitalized at \$100,000, to establish pearl-button factories; locations not determined.

Tenn., Nashville—Roofing, etc.—Nashville Roofing & Paving Co. incorporated with \$25,000 capital stock by E. W. Daley, G. M. Ingram, J. E. Wilson and others.

Tenn., Big Springs—Creamery.—Company organized with L. S. McDowell, president; J. J. Hair, vice-president; A. E. Pool, secretary; will establish creamery.

Tenn., Dallas—Sawdust Sweeping Compound.—Texas Cedar Chest Co., A. E. King, president and general manager, Paris and Sherman Sts., contemplates installing machinery to utilize sawdust and shavings in manufacture of floor-sweeping compound; was recently noted incorporated (under "Wood-working Plants") with \$1000 capital stock to make cedar chests. (See "Machinery Wanted.")

Tenn., Calvert—Carbonating.—Calvert Carbonating Co., recently reported incorporated with \$5000 capital stock, has elected C. O. Scholander, president; S. E. Smith, vice-president; W. S. Allen, secretary; J. H. Adone, treasurer; machinery mainly purchased; buildings erected. (See "Machinery Wanted.")

Tenn., Beaumont—Paper.—Chamber of Commerce plans organization of company to build plant for manufacturing paper from tupelo-gum timber and pine waste of sawmills.

Tenn., El Paso—Coffee.—Western Coffee Co. increased capital stock from \$50,000 to \$90,000, and will erect additional story to plant.

Tenn., Friona—Brooms.—Citizens' Co-Operative Development Co., C. C. Fredericks, president, 11 Carson Bldg., Amarillo, Tex., contemplates erection of broom factory.

Tenn., Houston—Brooms.—Thomas Hill of Port Lavaca, Tex., will establish broom factory at Port Houston.

Tenn., Houston—Ice Cream.—Okelawn Ice Cream Co. incorporated with \$5000 capital stock by Sid Westheimer, H. C. Hurley and H. A. Day.

Tenn., Taylor—Gas Plant.—R. E. Schurtz of Alamogordo, N. Mex., and associates have franchise to construct and operate gas plant.

Tenn., Tyler—Boats.—W. P. Hairston will establish sail and oar boat plant.

Tenn., Riverside—Electric Motors.—Multi-Electric Company of Fort Worth, Tex., proposes establishment of plant to manufacture electric motors; capacity 200 motors daily.

Va., Norfolk—Paper.—Oliver Cotton Fiber Co. plans \$100,000 bond issue to install machinery for manufacturing paper stock from cottonseed hulls and rice straw. (Previously proposed.)

Va., Portsmouth—Distillery.—Diamond Distilling Co. incorporated with \$10,000 capital stock; C. H. Brady, president and general manager; C. M. Rogers, vice-president; O. L. Volght, secretary-treasurer.

Va., Richmond—Automobiles.—Lancaster Automatic Railway Co. purchased Richmond Iron Works for \$65,000, and will merge under name of Richmond Iron Works Corporation; will manufacture automobiles in connection with present products.

Va., Winchester—Cider, Vinegar, etc.—Shenandoah Valley Cider & Vinegar Co. incorporated with \$50,000 capital stock; John Thwaite, president; E. V. Weems, vice-president; Ray Robinson, secretary-treasurer.

W. Va., Charleston—Signs.—Silman-Hughes-Carey Sign Co. incorporated with \$5000 capital stock by Peter Silman, Bert Silman, F. W. Hughes, C. E. Carey and U. B. Atkinson.

W. Va., Wheeling—Patent Medicines.—Fred Yost Company incorporated with \$25,000 capital stock by Fred Yost, James M. Noble, James B. Howard and others.

ROAD AND STREET WORK

Ala., Birmingham.—City opened bids July 6 for certain grading and macadamizing and storm sewer drains; Maury Nicholson, City Engineer.

Ala., Mobile.—Board of Public Works has engaged Wright Smith as engineer in charge of construction of 50-foot roadway on Broad St.; creosoted wood blocks to be used; concrete viaduct is to drain area to be improved and Jefferson St. school district; date of opening bids not set; Board of Aldermen will be asked to authorize \$117,000 (not \$125,000, as recently stated) bond issue.

Ala., Mobile.—Board of Aldermen authorized \$117,000 bond issue for proposed improvements included in eighth paving venture; Pat Lyons, Mayor.

Ala., New Decatur.—City will expend \$12,000 to construct five miles four-foot sidewalk; W. A. McCalla, engineer in charge of construction; contract recently noted awarded to W. M. Leftwich Co., Nashville, Tenn.

Ga., Rome.—City will vote on issuance of \$35,000 of bonds for street paving; streets will include Broad St. and North Fifth Ave. Address The Mayor.

Ark., Helena.—City will pave principal streets; four improvement districts have been organized. Address The Mayor.

Ark., Little Rock.—City awarded contract to Henry Dalhoff of Little Rock to macadamize Prospect Ave., in Pulaski Heights.

Ark., Little Rock.—Commissioners of West 14th St. Improvement District, H. S. Turner, secretary, will expend \$32,000 for two miles of macadam paving; tarvia for filler; Martin Sharp, engineer in charge; bids opened June 29. (Recently noted.)

Fla., Pensacola.—City will construct 525,000 square feet concrete sidewalks; bids to be opened August 10; L. Earle Thornton, City Engineer; L. G. Aymard, clerk Board of Public Works. (See "Machinery Wanted.")

Fla., St. Augustine.—St. John's County Commissioners and Engineer C. M. Milburn of St. Augustine have completed preliminary details for construction of road from St. Augustine to Elkton and Hastings, Fla., and invite bids until August 1; plans and specifications on file in office of County Clerk; \$30,000 available. (See "Machinery Wanted.")

Fla., St. Petersburg.—City will pave 9th St. and Fourth Ave. with vitrified brick, laid flat; granite or cement concrete curbing; bids to be opened July 14; W. F. Divine, City Clerk. (See "Machinery Wanted.")

Ky., Berlin.—Weaver & McClanahan Turnpike Co. incorporated with \$4000 capital stock by James B. McClanahan, Charles Meyer and W. S. Reese.

Ky., Lexington.—City awarded contract to Kelly Bros., Portsmouth, Ohio, to reconstruct Limestone St. from Short to Maxwell St. (Further facts recently mentioned.)

Ky., Fulton.—City has engaged Robert

Richardson, engineer, Memphis, Tenn., to prepare plans and specifications and superintend paving of sidewalks.

Ky., Lexington.—City will pave Main St. with brick, bitulithic, creosoted wooden block or asphalt paving; 24.5¢ square yards of paving, 3975 cubic yards concrete and 775 feet of limestone or concrete curbing; bids to be opened July 9; John Skaln, Mayor. (See "Machinery Wanted.")

La., New Orleans.—Finance Committee of City Council recommended following bids for street improvements: Barber Asphalt Paving Co. (main offices, Philadelphia, Pa.), sub-surface drainage, sidewalks, curbing, etc., on Joseph St., at \$165.20; for sub-surface drainage, etc., on Elmira St., at \$1169.90; sub-surface drainage on Magazine St., at \$3153.75; paving with creosoted block Morgan Blvd., at \$2095.10; paving with pitch lake asphalt, Joseph St., at \$3294.60; Standard Paving & Construction Co. of New Orleans, resurfacing Elmira St., at \$1657.50; R. S. Blome Company, Chicago, Ill., paving Magazine St. with granitoid, at \$2137.

Md., Baltimore.—City will pave Fayette St. from Lakewood Ave. to eastern city limits; bids to be opened July 13; B. T. Fendall, City Engineer. (See "Machinery Wanted.")

N. C., Smithfield.—Town will construct concrete sidewalks; bids to be opened July 12. Address The Mayor. (See "Machinery Wanted.")

Okla., Frederick.—City will pave streets in business district with vitrified brick. Address The Mayor.

Okla., Nowata.—City awarded contract to Southwestern Construction & Paving Co. of Nowata to construct 38,442 square yards brick pavement, together with combined curb and gutter and storm sewers; R. K. Sutton, City Engineer. (Recently mentioned.)

S. C., Greenville.—City will open bids July 23 for 29,000 square yards street paving; H. S. Jaudon Engineering Co., engineer, Savannah, Ga., and P. O. Box No. 61, Greenville; W. E. Beattie, chairman Greenville Paving & Sewer Commission. (Recently mentioned. See "Machinery Wanted.")

Tenn., Chattanooga.—Board of Public Works awarded contract to West Construction Co. of Chattanooga to pave Chestnut and Market Sts. with asphalt and Wyatt and Spruce Sts. with asphalt macadam; Noll Construction Co. to pave Main and 9th Sts. with brick. (Recently mentioned.)

Tenn., Memphis.—Shelby county will gravel about 29 miles of roads; bids to be opened July 9; D. P. Prescott, secretary Turnpike Board. (See "Machinery Wanted.")

Tenn., Nashville.—Board of Public Works awarded contract to E. T. Lewis & Co. of Nashville at \$4,342.86 for grading, macadamizing and rolling of Ninth Ave. north from Coffee to Cass St.

Tenn., Nashville.—Board of Public Works awarded contracts for 70,000 square feet of granitoid concrete curbing and sidewalks as follows: Southern Roofing & Paving Co., East Lindsey and South 13th Sts.; Cuniff, Stone & Co., North 1st, North 5th and Wilburn Sts.; J. W. Quinn, Cleveland St.; R. L. Cash, Hancock St.; T. O. Dillard, Miller Ave. and Arrington St.; G. W. Maddux, North 2d and Joseph Sts.; Adamant Stone & Roofing Co., Meridian St.; Capitol City Construction Co., Berry St.; Rogers & Son, Stainback Ave.; all of Nashville.

Tenn., South Pittsburg.—City will let contract to local contractor for grading and macadamizing roads recently noted; W. H. Wilson, Mayor.

Tenn., Amarillo.—City will construct 80,000 square yards of pavement with bitulithic, vitrified brick, sheet asphalt or rock asphalt; bids to be opened July 25; E. L. Dalton, engineer, Amarillo, Tex.; Sam J. Brown, City Secretary. (See "Machinery Wanted.")

Tenn., Brownsville.—City will vote August 2 on adoption of plan provided by Legislature for improvement of streets and sidewalks. Address The Mayor.

Tenn., Dallas.—City will pave Elm St. from Ervay St. to Houston & Texas Central Railroad with creosoted pine blocks or vitrified brick blocks on concrete base; concrete curbs where necessary; bids to be opened July 11; J. B. Winslett, City Secretary. (See "Machinery Wanted.")

Tenn., Dallas.—City awarded contract to Texas Bitulithic Co. of Dallas at \$2.60 per square yard to pave Elm St. from Jefferson St. to Broadway; total cost \$8894.40, of which city's part is \$3182.50.

Tenn., Denison.—Grayson county will construct 65 miles of macadam road in Road District No. 1, in vicinity of Denison; bids to be opened August 10; H. R. Wallace, County Auditor, Sherman, Tex. (See "Machinery Wanted.")

Tenn., Houston.—Harris county awarded contract to T. A. Blair of Houston at \$9000 to construct Brays Blvd. through Magnolia Park; road will be 80 feet wide, with 16 feet of shell placed on crushed-rock base; shell to be supported on each side with layers of crushed rock.

Tenn., McKinney.—Collin county defeated \$125,000 bond issue for construction of about 40 miles of road. Address County Commissioners. (Recently mentioned.)

Tenn., Mexia.—Limestone county will vote July 16 on issuance of \$200,000 of bonds for construction of rock roads in Mexia precinct. Address County Commissioners at Groesbeck, Tex.

Tenn., Red Oak.—Red Oak District of Ellis county voted issuance of bonds for road construction. Address District Commissioners.

Tenn., Waco.—City awarded contract to Texas Bitulithic Co., Dallas, Tex., to pave Austin St. from 5th to 18th St.

Va., Chatham.—City will vote July 28 on \$7000 bond issue for macadamizing Main St., recently noted; J. H. Hargrave, Jr., Mayor.

Va., Richmond.—City awarded contract at \$2.20 per square yard to I. J. Smith & Co. of Richmond to pave Monument St. from Allison St. westwardly; appropriation \$20,000. (Recently mentioned.)

Va., Richmond.—Finance Committee recommended appropriation of \$15,000 for street improvements in Manchester.

W. Va., Huntington.—Board of Commissioners will receive bids until July 25 for grading, draining, paving and curbing with vitrified brick, sheet asphalt, asphalt block or bitulithic; bond issue of \$200,000 previously noted voted; John Coon, Commissioner of Streets; A. B. Maupin, City Engineer. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ala., Alexander City.—City will vote July 18 on \$12,500 bond issue for extension to sewer system, water-works, etc.; T. C. Russell, Mayor.

Ga., Rome.—City will vote on issuance of \$50,000 of bonds for construction of sewer system. Address The Mayor.

Ga., Sylvania.—City will open bids July 26 for construction of sewer system; cost about \$4000; A. B. Lovett, Mayor; J. B. McCrary Company, engineer, Atlanta, Ga. (Recently mentioned. See "Machinery Wanted.")

Md., Baltimore.—City is arranging to construct storm-water drains, contract No. 10; bids to be opened July 20; Peter Leary, Jr., chairman Sewerage Commission, 904 American Bldg. (See "Machinery Wanted.")

Mo., St. Louis.—Board of Public Improvements awarded contract to Hoffman-Hogan Construction Co., 2712 Wyandotte St., St. Louis, at \$288,157, to construct first section of Baden St. sewer; Universal Construction Co. of St. Louis is lowest bidder at \$604,519 for construction of second section of River Des Peres foul-water sewer. (Recently mentioned.)

Okla., Altus.—City has awarded contract to J. W. Maxey Company, Scanlan Bldg., Houston, Tex., for improvements to sewer system to cost \$25,000.

S. C., Aiken.—City will vote in July on issuance of \$75,000 of bonds for construction of sewerage system and water-works. Address The Mayor.

S. C., Florence.—City awarded contract at \$69,368 to Johnson-Matthews Construction Co. of Charleston, S. C., to construct sewer system.

Tenn., Memphis.—Helskel Weatherford, City Engineer, will prepare plans for construction of sewers in annexed territory from Trigg Ave. to Parkway, west of Yazoo & Mississippi Valley Railroad, and from Florida to Main Sts.

Tenn., Memphis.—City awarded contract to T. A. Garvin of Memphis at \$11,468.75 to construct Olive St. district sewers.

Tenn., Cameron.—City will vote on issuance of bonds for construction of sewer system. Address The Mayor.

Tenn., Friona.—Citizens' Co-operative Development Co., C. C. Fredericks, president, 11 Carson Bldg., Amarillo, Tex., contemplates construction of sewerage system.

Tenn., Memphis.—City Council has contracted with E. L. Dalton, Dallas, Tex., to prepare plans and specifications for \$20,000 sanitary sewer system.

W. Va., Princeton.—City awarded contract to T. Towles & Co. of Princeton at \$30,000 to construct 24 and 30-inch cast-iron pipe sanitary sewers and from 10 to 24-inch terracotta pipe sewers.

TELEPHONE SYSTEMS

Ark., Hot Springs.—Southern Bell Telephone Co. and Southern States Telephone Co. consolidated and will expend \$300,000 for improvements.

Fla., Bonifay.—Bonifay Telephone Co. incorporated with \$5000 capital stock; Albert Jernigan, president; C. A. Prim, secretary-treasurer.

Ky., Kirksey.—Kirksey Telephone Co. incorporated by R. L. Williams, A. F. Tidwell and M. W. Harris.

La., Lake Arthur.—Cumberland Telephone & Telegraph Co., Leland Hume, general manager, Nashville, Tenn., will establish telephone exchange.

Okl., Altus.—Pioneer Telephone Co. of Oklahoma City, Okla., purchased Leger & Chickasha Telephone Co. and Mangum & Quanah Telephone Co. for \$90,000, consisting of 5 exchanges, 17 toll lines and 14 rural lines; will make improvements.

Okl., Carmen.—Eagle Chief Telephone Co. incorporated by R. M. Johnson, S. Terrell and others.

TEXTILE MILLS

Ga., Raymond.—Knit Goods.—Raymond Land Co. has erected building for knitting mill, and contemplates installing necessary machinery. (See "Machinery Wanted.")

Okl., Ardmore.—Cotton Goods.—M. L. Alexander, W. B. Johnson, James E. Humphrey and associates plan organization of \$200,000 company to build cotton mill recently mentioned.

S. C., Winnsboro.—Cotton Goods.—Fairfield Cotton Mills will meet July 28 to consider increasing capital stock \$100,000 for additional equipment; now has 25,000 ring spindles and 500 broad looms.

Tex., Fort Worth.—Cotton Goods.—A. W. Samuels proposes organization of \$200,000 company to build cotton mill.

Tex., Galveston.—Cotton Waste.—Galveston Waste Mills increased capital stock from \$10,000 to \$20,000.

Tex., Quanah.—Cotton Goods.—P. A. Whaley, secretary of Quanah Chamber of Commerce, plans organization of \$350,000 company to build cotton mill; Eastern parties interested.

Va., Suffolk.—Cotton Goods.—Board of Trade plans organization of company to build cotton mill.

WATER-WORKS

Ala., Alexander City.—City will vote July 18 on \$12,500 bond issue for extension to water mains, sewers, etc.; T. C. Russell, Mayor.

Ala., Anniston.—City defeated \$100,000 bond issue for purchasing plant of Anniston Water Supply Co. Address The Mayor. (Recently mentioned.)

Ark., Leslie.—City Council granted franchise to J. W. Vaughn and James F. Kiser of Leslie to construct water-works and electric-light plant.

Fla., Chipley.—City voted issuance of bonds for improvement of water-works. Address The Mayor.

Ga., Macon.—City contemplates voting as to whether water-works of Macon Gaslight & Water Co. be purchased or contract with company renewed. Address The Mayor.

Ga., Rome.—City will vote on issuance of \$35,000 of bonds for pumping station, including buildings, boilers, pumps, etc.; \$10,000 for meters; \$25,000 for distribution. Address The Mayor.

Ga., Sylvania.—City will open bids July 20 for construction of water-works; 100,000 gallons capacity; cost about \$20,000; A. B. Lovett, Mayor; J. B. McCrary Company, engineer, Atlanta, Ga. (Recently mentioned. See "Machinery Wanted.")

Ga., Swainsboro.—City is considering construction of water-works. Address The Mayor.

Ky., Leitchfield.—City contemplates construction of water-works. Address The Mayor.

Ky., New Haven.—City will construct water-works. Address The Mayor.

Md., Baltimore.—B. F. Bennett Building Co., 123 South Howard St., Baltimore, is lowest bidder at \$127,130 for construction of proposed pumping station for pipe-line system on South, near Pratt St.

Md., Sherwood Station, P. O. Rider.—Sherwood Park Water Co. incorporated to furnish water to Sherwood and vicinity; Frank B. Jenkins, manager Kingan Provision Co., 355 North St., Baltimore, Md., and others are incorporators.

Miss., Collins.—City contemplates construction of reservoir; local contractor will be employed; C. H. Ramsay, Mayor.

Mo., California.—City awarded contract to Burns & McDonnell, Kansas City, Mo., for construction of water-works previously noted; cost \$30,000.

Mo., Huntsville.—City awarded contract to G. Jaeger, Rich Hill, Mo., at \$11,160, to construct water-works, including laying of pipe, setting of hydrants, etc.; separate contracts awarded for cast-iron pipe and specials, tower and tank, hydrants and valves; L. G. Knapp & Co., New York Life Bldg., Kansas City, Mo., are engineers. (Recently mentioned.)

Mo., Joplin.—City will install pumping engine of 7,000,000 gallons daily capacity in pumping station; contract awarded. Address superintendent of water-works.

S. C., Fort Moultrie.—Bids will be opened July 29 for construction of three reinforced concrete reservoirs and water-distributing system for fire purposes. Address Constructing Quartermaster. (See "Machinery Wanted.")

Okl., Altus.—City awarded contract to J. W. Maxey Company, Scanlan Bldg., Houston, Tex., for improvements to water-works to cost \$130,000; water is to be secured about seven miles north of city.

Okl., Carnegie.—City has engaged Oklahoma Engineering Co., 129 Broadway, Ann-darke, Okla., as engineer in charge of proposed improvements to be made to water-works at cost of \$25,000; bids will soon be invited; S. F. Robohn, City Clerk.

S. C., Aiken.—City will vote in July on issuance of \$78,000 of bonds for construction of water-works and sewerage system. Address The Mayor.

S. C., Columbia.—City awarded contract to Thornwell McMaster of Columbia to construct 12-inch water main on Huger St. and 6-inch main on Elmwood Ave.; contract prices, \$788.25 and \$342.17, respectively.

Tex., Brownsville.—City will improve water-works; cost \$15,000; awarded contract to W. E. Randall of Brownsville for construction of settling tanks. Address The Mayor.

Tex., Friona.—Citizens' Co-operative Development Co., C. C. Fredericks, president, 11 Carson Bldg., Amarillo, Tex., contemplates construction of water-works.

Tex., Lyford.—Gulf Coast Irrigation Co. will construct complete water-works system, including steel storage reservoir; gasoline engine will be installed in artesian well; foundation for reservoir completed.

Tex., Quanah.—City Council accepted proposition of Fountain & Shaw, engineers, Houston and Dallas Sts., for construction of water-works; lateral dam system.

Tex., Seymour.—City has contracted for construction of water-works to cost about \$25,000. Address The Mayor.

Va., Graham.—City contemplates voting on issuance of \$10,000 of bonds for improvements to water-works. Address Mayor Smith.

Va., Old Point Comfort.—Government is preparing to make various improvements on Fisherman's Island, including construction of water-works; plans prepared and bids will be invited; estimated cost \$12,000 to \$15,000. Address Dr. Cumming in charge of United States Quarantine Station, Old Point Comfort.

WOODWORKING PLANTS

Ala., Anniston.—Heading, etc.—Lubin Manufacturing Co. is name of company recently noted to be established by W. H. McKleroy and others; capital stock, \$25,000; will manufacture heading, mill and wood specialties; W. H. McKleroy, president; M. D. Lubin, manager.

Ga., Atlanta.—School Furniture.—Prof. N. W. Hurst, superintendent of schools at Eastman, Ga. (now registered at Piedmont Hotel, Atlanta), is promoting organization of company with \$100,000 capital stock to manufacture school furniture and supplies and planitarium; latter is invention of Professor Hurst.

Ky., Hickman.—S. L. Dodds purchased Hickman Wagon Co.'s plant; will improve and operate.

Miss., Hattiesburg.—Automobile Wheels.—Modern Utility Co., Indianapolis, Ind., plans establishment of plant for manufacturing automobile wheels; considering several Southern cities, including Hattiesburg, but has not decided on location. (Recently mentioned incompletely under Meridian, Miss.)

Okl., Sapulpa.—Furniture.—B. A. Reitz, Evansville, Ind., will establish furniture factory; company will be organized with \$50,000 capital stock.

Tex., Terrell.—O. F. Walton Lumber Co. is planning establishment of wood factory; will erect building 70x120 feet.

BURNED

Fla., Tampa.—Gulf Refining Co.'s warehouses, offices and engine-rooms; loss \$10,000; main office, Pittsburg, Pa.

La., Ruston.—G. M. Lomax Lumber Co.'s planing mill; loss about \$5000.

Md., Fairfield.—Impervious Products Co.'s boiler-room and shed, near Fairfield, at Wagner's Point; loss \$25,000; main office 213 St. Paul St., Baltimore, Md.

Mo., St. Louis.—Waters-Pierce Oil Co.'s warehouse; estimated loss \$250,000.

Mo., Webb City.—Lead and zinc mill controlled by Chapman & Lannan; loss \$35,000.

Tenn., Smithville.—Smithville Hardware Co.'s warehouse; estimated loss, \$7000.

Tex., Denison.—W. F. Bennett's residence on Bond St.; loss \$6000.

Tex., Nacogdoches.—George P. Clevenger's sawmill; estimated loss \$50,000.

Va., Aylett.—W. D. Ronzie's sawmill.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Md., Baltimore.—C. W. Pacy Company organized with \$25,000 capital stock by Charles William Pacy of Douglas Court, Broadway and 147th St., New York; will erect apartment and business building at Charles and Cross Sts.; site 70x140 feet.

Okl., Tulsa.—George T. and Robert B. Williamson will erect apartment-house; three stories; three suites of five rooms each; cost \$15,000.

Va., Portsmouth.—L. Kootz has plans by Edward Overman, Portsmouth, for store and apartment building; two stories; brick and stone; 80x75 feet; lower floor stores; upper floor four flats of six rooms each.

Va., Portsmouth.—W. T. Eastwood and A. Rosenbaum will erect apartment-house; six apartments; cost \$18,000 to \$20,000.

ASSOCIATION AND FRATERNAL

Ala., Montgomery.—Ancient Free and Accepted Masons arranging for erection of widows and orphans' home recently noted; to consist of administration building and two cottages; fireproof construction; cost \$50,000; will receive plans until July 18; Ben M. Jacobs, chairman of committee.

S. C., Columbia.—Young Men's Christian Association, W. A. Merritt, president, has plans by Wilson, Sampayrac & Urquhart, Columbia, for association building recently noted; 50x110 feet; three stories and basement; ordinary construction; steam heat; cost \$35,000; will let contract early in fall.

S. C., Greenville.—Young Men's Christian Association is having plans prepared by Wilson, Compayrac & Urquhart, Columbia, S. C., for building. (Recently mentioned.)

Tenn., Ducktown.—Young Men's Christian Association will erect building; 85x120 feet; two stories; verandah on entire front of both stories; will contain gymnasium 50x50 feet.

Va., Lynchburg.—Young Men's Christian Association will develop 30-acre island on James River; construct half-mile running track and two baseball fields; erect clubhouse and boathouse, and provide for swimming.

W. Va., Bluefield.—Bluefield Aerie No. 875, Fraternal Order of Eagles, contemplates erection of lodge building.

BANK AND OFFICE BUILDINGS

Ala., Birmingham.—Birmingham Water-works Co. will erect two-story addition to office building on First Ave. between 21st and 22d Sts.

Ga., Vidalia.—First National Bank of Vidalia has plans by I. P. Crutchfield, Vidalia, for bank building recently noted; 30x45 feet; fireproof construction; cost \$5000; day's work.

La., Opelousas.—Union Bank & Trust Co. will erect two-story brick bank building, to cost \$20,000. (Recently mentioned.)

Md., Hughesville.—Bank of Hughesville is having plans prepared by Otto G. Simonson, 1210 American Bldg., Baltimore, Md., for two-story bank building.

N. C., Marshall.—J. H. White and associates will erect bank and office building; two stories; brick; 25x90 feet; contract will soon

be awarded; plans by Smith & Carrier, Asheville, N. C.

Okl., Oklahoma City.—Oklahoma Railway Co. contemplates, it is reported, erection of 14-story building at Grand and Harvey Aves.; Layton, Smith & Hawk of Oklahoma City reported as architects.

S. C., Pageland.—Bank of Pageland will erect bank building to cost \$8000.

Va., Richmond.—Planters' National Bank purchased for \$21,000 lot and building adjoining present bank building, and contemplates erection of addition; site is 23x102 feet.

Va., Warrenton.—People's National Bank purchased building for \$7500 and will remodel.

W. Va., Romney.—First National Bank will have plans prepared by Holmboe & Lafferty, Clarksburg, W. Va., for bank building; two stories; brick; ordinary construction; steam or hot-water heat. (Recently mentioned.)

CHURCHES

Ga., Atlanta.—Park St. Methodist Church, Dr. J. W. Lee, pastor, adopted plans by Edward Choate of Atlanta for edifice; granite, Indiana limestone, Roman gray brick and terra-cotta; roof of green semi-glazed tile; auditorium 82x84 feet, and, with balcony in rear, will seat about 800; Sunday-school room will be 52x100 feet, with seating capacity of 1000; bell tower 95 feet above ground; estimated cost \$50,000. (Recently mentioned.)

Ga., Atlanta.—Mt. Vernon Methodist Church, Rev. Felton Williams, pastor, has begun erection of proposed edifice; steam heat; electric lighting; estimated cost \$15,000.

Ga., Savannah.—Westminster Presbyterian Church, Rev. W. A. Nisbet, D.D., pastor, will erect edifice; \$40,000 available.

Ky., Whitesburg.—J. P. Lewis may be addressed for information relative to erection of Baptist church to cost \$6000.

La., Ruston.—First Baptist congregation accepted plans and specifications for edifice; brick and concrete; estimated cost \$16,000. Address The Pastor, First Baptist Church.

N. C., Mt. Gilead.—Methodist Episcopal Church South, Rev. J. A. Lee, pastor, will let contract in July for erection of edifice recently noted; seating capacity 500; ordinary brick construction; heating and lighting not decided; cost \$10,000; plans by Wheeler & Stern, Charlotte, N. C. Address proposals to O. C. Brenton, secretary.

Okl., Oklahoma City.—First Baptist Church is having plans prepared by Huntington & Sears, James Bldg., Chattanooga, Tenn., for edifice; 116x200 feet; cost \$100,000; architects will receive bids. (Previously mentioned.)

S. C., Marion.—First Methodist Church, S. B. Harper, pastor, contemplates considering plans and choosing site in fall for brick edifice recently noted; estimated cost, complete, \$40,000.

S. C., Rockhill.—First A. R. P. Church will ask bids July 12, through architect, J. S. Starr of Rock Hill, for enlargement of edifice; addition 44x52 feet, to contain room for pipe organ, five classrooms, two toilets and library; brick veneer; slate roof; metal ceiling; light-brown press-brick wall. (See "Machinery Wanted.")

Tenn., Greeneville.—First Methodist Episcopal Church will erect edifice; 62x82 feet; ordinary construction; steam heat; electric lighting; cost \$25,000; plans by W. P. R. Pember, Albany, N. Y.; bids opened June 15 to July 15; James F. Swingle, chairman building committee.

Tenn., Nashville.—Trustees of Calvary Baptist Church will open bids July 21 for rebuilding edifice recently reported burned; 40x52 feet; seating capacity 350; concrete-block wall; hot-air furnace; electric lighting. Address Wilson Woodcock, 604 28th Ave., North Nashville.

Tex., Quanah.—First Baptist congregation will erect edifice to cost \$25,000. Address The Pastor, First Baptist Church.

CITY AND COUNTY

Ala., Florence.—Jail.—Commissioners' Court of Lauderdale County will receive bids until July 12 for erection of two-story brick and stone fireproof jail building; certified check for \$500; plans and specifications from J. L. Hughton, Judge of Probate, Florence, to whom bids must be addressed, and Smith & Carter, architects, Montgomery, Ala.; separate bids for building and jail work. (Recently mentioned.)

Ga., Rome.—Library.—Carnegie Library Association has plans by Cooksey & Maxwell, Atlanta, Ga., for Carnegie Library; two stories; pressed brick; cost \$15,000. (Previously mentioned.)

Mo., Kansas City.—City will expend \$20,000 to erect city hall building recently noted; 100x155 feet; two stories and basement; buff brick and stone; plans by R. L. McBride, Independence, Mo.; bids opened July 5.

Tenn., Memphis.—Engine-house.—Bids addressed to commission will be received at office of Shaw & Phiel, 1503 Tennessee Trust Bldg., Memphis, until July 16 for erection of engine-house at Adams Ave. and Malden Al.; two stories; 45x100 feet; certified check for \$2000; plans and specifications at office of architect as above; Dave Halle, chairman; D. E. Armstrong, secretary.

Tex., Amarillo.—City Hall.—City has plans by J. C. Berry, Amarillo, for city hall; concrete and brick construction; two stories and basement; jails in basement; reinforced-concrete floors over jails; cost \$12,000; plans ready for bids July 12. (Previously noted.)

Tex., Austin.—Fire Hall.—City will erect fire hall for Tenth Ward Fire Company at 1st and Waller Sts.; two stories; 50x80 feet; cost \$7500. Address Mayor Woolridge.

DWELLINGS

Ala., Bay Minette.—Thomas W. Gilmer, manager of Bay Minette Land Co., will erect residence.

Ala., Gadsden.—C. T. Coker will erect residence.

D. C., Washington.—Richard Ough & Son, Potomac Bank Bldg., will expend \$24,000 to erect eight dwellings; 18x42 feet each; hot-water heat; electric lighting; plans and construction by owner. (Recently noted.)

Fla., Jacksonville.—J. M. Bell will open bids July 10 for erection of proposed dwelling; 35x43 feet; electric lighting; cost \$2500; plans by W. B. Camp, Jacksonville.

Fla., Jacksonville.—W. A. Evans will erect two-story frame dwelling; cost \$15,000.

Fla., St. Petersburg.—H. W. Hibbs will erect store and dwelling; two stories; 40x80 feet; artificial building blocks; lower floor, two stories; upper floor, dwelling.

Ga., Atlanta.—Hartsack-Williams Company will erect residence; cost \$4000.

Ga., Atlanta.—H. M. Randolph will erect \$6500 residence.

Ga., Atlanta.—M. J. Collins will erect \$5500 residence.

Ga., Rome.—J. H. O'Neill will erect \$6500 residence.

Ga., Savannah.—John E. Foy will erect residence.

Ga., Savannah.—H. D. Grewe will erect stores and dwellings.

Ga., Savannah.—T. A. Bryson will erect bungalow at Beaulieu.

Ga., Savannah.—W. K. Pearce has plans by Wallin & Young, Savannah, for residence; finished quarter-face brick; dark tile roof; porches entirely surrounding building 14½ feet wide; portecochere over main driveway leading to garage to be erected in rear and connected to front porch by covered walk; gable roof; hot-air or hot-water heat.

La., New Orleans.—Andrew G. Friederichs will erect single frame residence; cost \$5000.

Md., Baltimore.—Fairmont Realty Co., 2560 West Fairmont Ave., will expend \$14,000 to erect 10 two-story dwellings; 14x48 feet; brick; hot-air furnace; gas lighting; plans by F. E. Beall, 231 St. Paul St., Baltimore; construction by owner.

Md., Roland Park.—Hyland Cox has plans by E. L. Palmer, 112 Elmhurst Rd., Roland Park, for two-and-a-half-story frame cottage; 39x56 feet; cost \$7000.

Md., Baltimore.—William G. Henkel, 1021 Light St., is having plans prepared for 10-room cottage at Taney Rd. and Green Spring Ave.

Md., Baltimore.—J. Howard Dalrymple has plans by C. E. Anderson, Law Bldg., Baltimore, for two-and-a-half-story frame cottage on Dalrymple Ave.; 25x29 feet; cost \$3500; awarded contract to R. I. Rumpf.

N. C., Asheville.—J. C. Pritchard will erect eight-room residence; cost \$4000.

N. C., Scotland Neck.—G. Hoffman will erect \$10,000 residence.

Okla., Oklahoma City.—C. B. Ames will erect \$20,000 residence.

S. C., Anderson.—W. N. Thompson has plans by Sayre & Baldwin, Anderson, for dwelling; seven rooms; two stories; brick veneer; tile floors; electric lighting; cost \$5000.

S. C., Lamar.—F. Ward will open bids July 5 for erection of residence recently noted; 40x44 feet; gas and electric lighting; cost \$4000; plans by J. H. Johnson, Sumter, S. C.; address architect. (See "Machinery Wanted.")

S. C., Rock Hill.—J. T. Neely has had plans

prepared by J. S. Starr, Rock Hill, S. C., for residence with 10 rooms and bath; cost \$3500.

Tenn., Hill City.—J. C. Fletcher, Mitchell Ave., is having plans prepared for dwelling; 11 rooms; frame and stucco; hard pine interior finish; gas and electric lighting; heating not decided; cost \$3500.

Tenn., Hill City.—Mrs. D. A. Marshall, 314 Colville St., is having plans prepared by Huntington & Sears, James Bldg., Chattanooga, for dwelling; nine rooms; frame; one and a half story; concrete floor to basement; hard-pine interior finish; hot-water heat; gas and electric lighting; cost \$3000.

Tex., Arcadia.—M. R. Davis will erect house and barn.

Tex., Houston.—Harry S. Tschapek will erect seven-room residence; cost \$3000.

Tex., Raymondville.—A. D. Struthers will erect \$5000 residence.

Tex., Victoria.—Mrs. W. H. Sutherland has plans by Jules Lefland, Victoria, for dwelling; cost \$5000.

Va., Carson.—P. B. Halligan has plans by M. P. Andrews & Co., Petersburg, for improvements to dwelling; cost \$5000; day's work.

Va., Covington.—M. D. Miller will let contract soon for erection of dwelling recently noted; 34x48 feet; to have porches; hot-water heat; electric lighting; cost \$5000; plans by S. E. Pace, Covington.

Va., Covington.—Dr. O. L. Rogers will open bids from July 1 to August 1 for erection of dwelling recently noted; 40x50 feet; two stories; first story will be brick, second frame; ordinary construction; hot-water heat; electric lighting; cost \$4000 to \$5000; plans by Max L. Keith, Minneapolis, Minn.

Va., Disputanta.—Dr. J. M. Williams has plans by M. P. Andrews & Co., Petersburg, for dwelling; cost \$5000.

Va., Fredericksburg.—G. B. Wallace has plans by Phillip Stern, Fredericksburg, for two dwellings; two stories and basement; 25x33 feet; ordinary construction; hot-air heat; tile mantels.

Va., Leesburg.—Lawrence Lee will erect residence.

Va., Lynchburg.—F. S. Kirkpatrick will erect residence; brick; metal roof; cost \$17,500.

Va., Miles (not a postoffice).—Vaughan Construction Co., Roanoke, Va., will erect dwellings for workmen; electric lights; construction by W. C. Hodge, Roanoke, master carpenter. (See "Mining.")

Va., Norfolk.—M. Lankford will erect brick residence; cost \$6500.

Va., Petersburg.—B. D. Booth has plans by M. P. Andrews & Co., Petersburg, for dwelling.

Va., Petersburg.—W. W. Hines has plans by M. P. Andrews & Co., Petersburg, for 10-room dwelling.

Va., Richmond.—T. A. Smyth will soon award contract for erection of \$20,000 colonial residence.

Va., Richmond.—R. W. Harris will erect \$3200 frame dwelling.

Va., Richmond.—W. A. Klererahl will erect two-story brick dwelling; cost \$4000.

Va., Roanoke.—Rachael MacDowell will erect three-story dwelling; cost \$6500.

Va., Roanoke.—James P. Woods will erect two-story brick-cased dwelling; cost \$5000.

GOVERNMENT AND STATE

Ala., Montgomery.—Sanitarium.—State will erect proposed sanitarium for tuberculosis patients; \$40,000 appropriated by Legislature; Braxton B. Comer, Governor, chairman of trustees.

Fla., Tallahassee.—Hospital.—Florida State Hospital for Insane contemplates erecting additional building at cost of \$20,000; Ralph N. Greene, chief physician.

Md., Fort Howard.—Guardhouse, etc.—First Lieut. Thomas A. Terry, district quartermaster, is preparing specifications for four buildings—guardhouse, one set of officers' quarters, building for housing fire-fighting apparatus and addition to machine shop; all will be fireproof throughout; guardhouse will be two stories high, of brick and steel, with concrete floors; other buildings will be of brick.

Tex., Palestine.—Postoffice.—Treasury Department, office of supervising architect, James Knox Taylor, Washington, D. C. Proposals will be received until August 19 for construction, complete (including plumbing, gaspiping, heating apparatus, electric conduits and wiring), of United States post-office in accordance with drawings and specifications, copies of which may be obtained

from custodian of site at Palestine or at above office at discretion of architect.

Va., Fort Monroe.—Hospital.—Proposals will be received until July 18 for construction of addition to post hospital at Fort Monroe, including plumbing, heating and electrical wiring and fixtures; for convenience of bidders in and near New York, plans and specifications may be seen in office of Chief Quartermaster, Department of the East, Governor's Island, New York; deposit of certified check for \$5 required as guaranty return plans and specifications; bidders to state name of manufacturers supplying material; information on application; Ernest R. Tilton, Captain and Quartermaster, U. S. A., Constructing Quartermaster.

HOTELS

Ala., Troy.—Edward Okel, Troy, prepared plans for Goldwaite Hotel.

Ala., Troy.—Bids will be received until July 15 for erection of four-story brick hotel; plans and specifications at office of Frank P. Lockwood, architect, Montgomery, Ala.

Fla., Fort Myers.—Everglade Land Co., Jacksonville, Fla., will open bids July 15 for erection of 20-room hotel on Lake Okeechobee; plans by W. B. Camp, Jacksonville; two-story structure; 30x80 feet; gasoline lighting.

Ga., Columbus.—James A. Lewis is preparing to remodel Racine Hotel and erect addition.

Okla., Enid.—Loewen Hotel, Albert Loewen, proprietor, reported to erect four-story addition; cost \$30,000.

Tenn., Nashville.—Tulane Hotel Co., Edwin Warner, president, is planning to remodel Tulane Hotel; install marble stairways with ornamental railings; enlarge dining-room; freight and passenger elevators; install fire-sprinkler system to cost \$10,000, telephone system, etc.; cost \$100,000. (Previously noted.)

Okla., Shawnee.—W. E. and W. F. Callahan, Omaha, Neb., will probably erect hotel to be leased by E. R. Ketner; plan proposed is to erect building 75x50 feet; eight stories.

Tex., Brownsville.—Cameron & Stell advise that contract is not yet awarded for erection of proposed hotel at Port Brownsville (new deep-water town); date of opening bids not decided; hotel to have 127 sleeping-rooms; fireproof; reinforced concrete and brick construction; cost \$100,000; steam heat; electric lighting; plans by Mason & Boyles (address care of Cameron & Stell). (Recently incorrectly noted awarded.)

Tex., Corpus Christi.—John D. Dickinson of Corpus Christi and D. Rider of Cambridge Springs, Pa., are promoting erection of tourist hotel.

Tex., San Antonio.—T. D. Cobbs will not at present erect hotel addition recently noted.

Tex., San Jose.—J. R. Burton has plans by H. L. Scott & Co., San Antonio, Tex., for hotel; 45 rooms; Spanish style; stucco exterior; tile roof; main veranda 10x160 feet, with 60-foot balcony above; steam heat; electric lights furnished from own plant; construction begun. (Previously mentioned.)

Tex., Woodward.—M. Bargas Company will erect \$20,000 hotel. (See "Land Developments.")

MISCELLANEOUS STRUCTURES

Ala., Montgomery.—Home.—Grand Lodge of Ancient Free and Accepted Masons, Washington Ave. and Perry St., is considering erection of proposed home for widows and orphans on cottage plan; central building to contain dining hall and apartments for administration of home; on either side of structure to be semi-detached buildings; all buildings fireproof; accommodations for 150 persons; site comprises 300 acres on Carter Hill Rd.; estimated cost \$75,000.

Ga., Albany.—Hospital.—Ladies' Hospital Association, Mrs. J. S. Davis, president, will erect three-story brick hospital; plans by M. J. Reidy of Albany; bids opened July 5 for construction, exclusive of plumbing, heating electric wiring and elevators.

La., Alexandria.—Stable, etc.—Hixon Bros. purchased for \$6000 site on which to erect livery stable and undertaking office.

Ga., Atlanta.—Natorium.—J. Woodson Rice, proprietor Natatorium, on Capitol Sq., purchased site on Spring St. and is having plans prepared by John C. Battle, Grant Bldg., Atlanta, for natatorium; building will be 50x150 feet; swimming pool 30x105 feet, and lined with white porcelain tile; also provide Turkish bath facilities; steam heat; electric lighting; estimated cost \$25,000.

Ky., Mayfield.—Clubhouse.—L. A. Chandler of Mayfield Mirror will have plans prepared by W. L. Brainard, Paducah, Ky., for wom-

an's clubhouse, public library and auditorium combined.

Md., Baltimore.—Restaurant.—John Niederhoefer, 22 South Gay St., awarded contract to L. Schoenlein, 2217 East Baltimore St., Baltimore, for erection of addition to restaurant recently noted; hot-water heat; gas and electric lighting.

Md., Frederick.—Grandstand.—Frederick County Agricultural Society will soon award contract for erection of grandstand on fair grounds; building will be 208 feet long and 54 feet deep; wood with concrete foundation; elevation of from 5 to 35 feet; 34 feet will be under roof, and parts exposed to weather, except seats, will be of concrete; seating capacity of 2500; plans by Hamme & Leber, West Bldg., York, Pa. (Recently mentioned.)

Md., Cumberland.—Hospital.—Western Maryland Hospital is having plans prepared by Wright Butler, 4 Water St., Cumberland, for extension of east wing of hospital and enlargement of laboratory.

Okla., Enid.—Swimming Pool.—Norman King, Edward Wood, Charles Wood and Gus Clark organized company to erect swimming pool and bathhouse; pool of concrete, 30x60 feet, 4 feet deep at one end and 10 feet at other.

Okla., Oklahoma City.—Business.—R. J. Williams will erect business block; 25x100 feet; cost \$10,000.

Okla., Tulsa.—Business.—George T. and Robert B. Williamson contemplate erecting business block.

Va., Lynchburg.—Orphanage.—Trustees of Presbyterian Orphanage, Rev. J. A. McMurray, secretary, contemplates removing orphanage to new location and erecting main central building, general heating plant, laundry, dairy and cottages.

RAILWAY STATIONS

Ark., Conway.—St. Louis, Iron Mountain & Southern Railway, M. M. Richey, general superintendent, Little Rock, Ark., will, it is reported, erect depot.

Fla., Tampa.—State Railroad Commission approved plans for union passenger station to be built by Tampa Union Station Co., and ordered completion by January 1; bids on station proper will be invited within two weeks; estimated cost \$175,000 to \$200,000; H. S. Thomas, Jacksonville, Fla., assistant engineer of Seaboard Air Line Railway, is in charge of plans, and will supervise construction. (Mentioned in April.)

N. C., Winston-Salem.—Winston-Salem Southbound Railway, O. H. P. Cornell, chief engineer, will erect 15 combined passenger and freight depots; bids will be opened July 15; for plans and specifications address chief engineer.

SCHOOLS

Ala., Birmingham.—City will vote August 22 on \$850,000 bond issue for school improvements; Frank P. O'Brien, Mayor.

Ala., Mobile.—School Commissioners rejected all bids for erection of Oakdale school and is having new plans prepared by Mr. McNeill, Mobile, for 14-room building. (Recently mentioned.)

Ala., Tuscaloosa.—J. I. Harrison, secretary of Board of Education, will receive bids until July 18 for erection of high-school building; certified check for \$500, payable to J. I. Harrison; plans and specifications at office of W. E. Benn, architect, Bessemer, Ala., or from Mr. Harrison, Tuscaloosa, on deposit of \$15.

Ark., Morrilton.—School directors have plans for annex to school; cost \$25,000.

Ark., Heber Springs.—School Board plans issuance of bonds to erect school to cost \$20,000 to \$25,000.

Fla., Chipley.—City voted bonds for waterworks and school improvements. Address The Mayor.

Ga., Grantville.—City will erect \$12,000 school building after plans by Bieckley & McDonald, Empire Bldg., Atlanta; two stories; ordinary brick construction; eight classrooms; tar and gravel roof; probably hot-air heat.

Ga., Rome.—School Board will erect \$9000 school on West 11th St.

Ga., Rome.—City Council favors \$35,000 bond issue to purchase Shorter College property for \$75,000 and \$5000 for repairing same; purchasing site and erecting school in Fourth ward for \$10,000; repairing Sixth ward school, \$3000; purchasing sites and erecting two negro schools, and \$1000 for repairs; J. D. McCartney, secretary of committee.

Ga., Rome.—Shorter College plans obtaining ultimate fund of \$400,000 to erect buildings on new site recently donated.

Ky., Whitesburg.—County Board of Education has plans by J. H. Gibson, Whitesburg, for school building; 80x148 feet; mill construction; heating and lighting not determined; cost \$15,000; bids not yet advertised.

La., Natchitoches.—State Normal School, J. B. Aswell, president, plans erection of \$50,000 dormitory.

La., New Orleans.—W. J. Hardee, City Engineer, completed plans for erection of two-story-and-basement brick school at Barracks, Dauphine, Hospital and Burgundy Sts.

Md., Baltimore.—City has plans by Glidden & Friz, 16 St. Paul St., Baltimore, for No. 70 school at William St. and Warren Ave.; two stories; brick; 24 rooms; cost \$115,000.

Md., Baltimore.—Bids will be received until July 13 for erection of addition to No. 60 school on Retreat St.; two stories; brick; six rooms; cost \$30,000; plans by Archer & Allen, Central Savings Bank Bldg., Baltimore.

Md., Lauraville.—Baltimore County School Board, Towson, Md., is receiving bids for erection of two-story brick addition to school.

Miss., Clinton.—Mississippi College, W. T. Lowry, president, is having plans prepared by R. H. Hunt, James Bldg., Chattanooga, Tenn., for proposed chemical laboratory building; fireproof construction; brick; reinforced concrete floors; stone and terra-cotta trimmings; composition roof; cost \$40,000.

Mo., Purcell.—Board of Education, Cal Morris, secretary, will receive bids until July 8 for erection of brick school; plans and specifications at residence of D. S. Woodmansee, Purcell.

N. C., Greensboro.—Bennett College will erect girls' dormitory; three stories; cost \$10,000.

N. C., Wilmington.—Wilmington school committee, Nos. 1 and 2, J. A. Taylor, chairman, will open bids July 4 for erection of school building recently noted; 94x63 feet; brick; hot-air heat; cost \$20,000; plans prepared by J. F. Leitner, Wilmington.

Okl., El Reno.—City will erect seven-room brick school; cost \$15,000. Address The Mayor.

S. C., Bennettsville.—School trustees will open bids July 29 for erection of school building recently noted; 60x100 feet; eight classrooms, office, library, laboratory, etc.; pressed brick; fan blast of heating; electric lighting; cost \$20,000; plans by Sayre & Baldwin, Anderson, S. C. (See "Machinery Wanted.")

S. C., Manning.—School District Commissioners will expend \$10,000 to erect school building; six rooms and auditorium; plans not determined. Address School Commissioners.

S. C., Pageland.—Trustee of Pageland School District sold \$500 of bonds to erect brick school.

S. C., Rock Hill.—Building committee, Friendship Institute (colored) is asking bids on erection of proposed college building to replace burned structure; J. S. Starr, architect, has completed plans; four-story brick building, with asbestos slate and tin roof; 45x65 feet; auditorium, classrooms and sleeping-rooms; cost about \$18,000.

S. C., Williston.—City voted \$12,000 bond issue for school improvements. Address The Mayor.

Tenn., Jersey.—J. S. Bell, president Board of Trustees, Bonny Oaks School, Hill City, Tenn., will receive plans until July 16 for brick building on Industrial School farm for dormitory, residence and school to accommodate 100 boys; cost not to exceed \$14,000.

Tex., Arcadia.—School Trustees will erect school; brick; cost \$8000.

Tex., Burton.—Hohenwalde School District voted tax to erect school. Address District School Trustees.

Tex., Forrester.—City voted \$12,000 school bond issue. Address The Mayor.

Tex., Gregory.—Bids will be opened July 16 for erection of frame school; certified check; plans and specifications at office of C. A. Stone, care Coleman-Fulton Pasture Co., Taft, Tex.

Tex., Lyford.—District school trustees plan erection of \$5000 school.

Tex., Navasota.—City will vote July 19 on \$20,000 school bond issue. Address The Mayor.

Tex., Penelope.—Penelope Independent School District will expend \$11,000 to erect school building recently noted; 54x75 feet; ordinary construction; plans by W. P. Tinsley, Fort Worth, Tex.; bids opened July 2.

Tex., Sutherland Springs.—New Sutherland Springs Independent School District, T. C. Richardson, secretary, will expend \$1500 to erect school building; 36x60 feet; three

rooms and vestibule; frame; stoves; bids opened. (See "Machinery Wanted.")

Tex., Waco.—Board of Education, J. C. Lattimore, secretary, 1124 South 5th St., will expend \$100,000 to erect school building recently noted; 160x123 feet; three stories and basement; 35 rooms; fireproof construction; combination of direct and indirect steam heat; plans prepared by Waller, Shaw & Field, Fort Worth, Tex., and Scott & Pearson, Waco; date of opening bids not set. (See "Machinery Wanted.")

Va., Chatham.—City will vote July 28 on \$3000 bond issue for enlarging high-school building recently noted; J. H. Hargrave, Jr., Mayor.

Va., Graham.—City will probably issue \$10,000 of bonds to erect school. Address The Mayor.

Va., Chatham.—City will vote July 28 on \$3000 bond issue to enlarge high-school building. Address The Mayor. (Recently mentioned.)

Va., Richmond.—Finance Committee recommended appropriation of \$10,000 for school improvements at Manchester.

W. Va., Keystone.—Brown's Creek District will vote on \$65,000 bond issue for school improvements at Keystone, Kimball and Welch. Address District School Trustees, Welch, W. Va.

W. Va., Kimball.—Brown's Creek District will vote July 19 on \$65,000 bond issue for school improvements at Kimball and Welch. Address District School Trustees, Welch, W. Va.

W. Va., Welch.—Brown's Creek District will vote July 19 on \$65,000 bond issue for repairing and remodeling schools at Welch, Keystone and Kimball, W. Va. Address District School Trustees.

STORES

Ala., Birmingham.—Drennen Company is having plans prepared by Martin & Miller, Birmingham, for department store; five stories and basement; concrete and brick; 15,000 square feet of ground space; cost \$100,000.

Ark., Little Rock.—R. K. and J. W. Black will erect one-story brick building; cost \$6000.

Ga., Atlanta.—Realty Building & Improvement Co., D. R. Creecy, Jr., president, 165 Peachtree St., will open bids within 60 days for erection of arcade building recently noted; 90x406 feet; 70 stores under one roof, ranging in size from 19x24 feet to 19x35 feet; have mezzanine floors, giving floor space of 19x55 feet to each store; rathskeller 87x90 feet; moving-picture theater on first floor and roof garden and vaudeville on roof; present plans call for 10 stories; estimated cost \$250,000; plans by P. Thornton Marye, Atlanta.

Fla., St. Petersburg.—H. W. Hibbs will erect store and dwelling. (See "Dwellings.")

Ga., Savannah.—H. D. Grewe will erect stores and dwellings.

Md., Baltimore.—Albert A. Brager, Eutaw and Saratoga Sts., has plans by C. M. Anderson, 314 North Charles St., Baltimore, for store at 225-27 Eutaw St.; four stories, brick; 44x100 feet; cost \$35,000; contractors estimating are Monmonier & Sorrell, 306 Laurens St.; W. E. Burnham, Builders' Exchange; George W. Tovell, 329 Dolphin St.; Thos. P. Johns, 1514 Harford Ave.; Henry Miller, 108 Dover St.; Engineering Contracting Co., 207 American Bldg., all of Baltimore. (Recently mentioned.)

Md., Baltimore.—R. E. Ember Company, 1016 East Baltimore St., has plans by John Freund, Jr., 210 East Lexington St., Baltimore, for store at 1016-18 East Baltimore St.; three stories; brick; 40x100 feet; cost \$20,000.

Md., Baltimore.—C. W. Pacy Company organized by Charles William Pacy, Douglas Court, Broadway and 147th St., New York; will erect business and apartment building. (See "Apartment-Houses.")

Miss., Shubuta.—Miss Annie McCarty will erect two-story brick store building.

Mo., St. Louis.—King-Brinsmade Mercantile Co., 17th and Washington Ave., will expend \$160,000 to erect wholesale building; nine stories; 80 feet by 134 feet 6 inches; fireproof construction; will install elevator to cost \$10,000; A. B. Groves, St. Louis, recently noted as preparing plans.

S. C., Greenville.—James F. Finley will erect business building.

Okl., Oklahoma City.—E. J. Weeks will erect business block (two stories); 50x70 feet; cost \$7500.

Tex., Hearne.—I. I. Rosenstein will expend \$7500 to tear down and rebuild store building recently noted; 25x105 feet; brick; fireproof construction; bids opened.

Tex., Putnam.—A. J. Olson of Cisco, Tex.,

will erect brick business building in addition to one now under construction.

Tex., Putnam.—Cook Grocery Co. will erect business building; 75x100 feet; two stories.

Okl., Oklahoma City.—W. F. Bush, 425-27 West Main St., will erect store building; three stories; concrete; cost \$20,000.

Tex., Houston.—Conrad Bering will erect store; two stories and basement; brick; cost \$8000.

Tex., Rochelle.—Martin Hardware & Furniture Co. will erect by day's work store building recently mentioned; two stories; 55x140 feet.

Tex., San Benito.—K. C. Smith, St. Paul, Minn., will erect business building; two stories; pressed brick; plate-glass front.

Tex., Temple.—R. B. Stephens will erect two-story brick building.

Va., Lynchburg.—Wilbur L. Moorman will erect store; cost \$5050.

Va., Petersburg.—Petersburg Investment Corporation has plans by M. P. Andrew & Co., Petersburg, for two frame buildings; cost \$6000.

Va., Richmond.—Jacobs & Levy will erect store building; three stories; brick; cost \$6700.

Va., Roanoke.—Dr. Kirk has plans by Huggins & Bates, Roanoke, for building; red brick; brownstone trimmings; will receive bids until July 12; structure will be 25x87 feet; two stories and water-proof basement; ordinary construction; steam heat; electric lighting; passenger elevator; prism and plate-glass fronts; galvanized cornice.

THEATERS

Va., Pulaski.—Benevolent and Protective Order of Elks awarded contract for erection of opera-house, lodge and store building. (See "Stores.")

W. Va., Wheeling.—John Papulad will erect theater to seat 2000 or more; roof supported by mammoth steel arches; three balconies on either side of main auditorium and main-entrance end; 53x154 feet; fireproof construction.

WAREHOUSES

Ga., Augusta.—Arrington Bros. will open bids July 1 for erection of warehouse recently noted; 80x153 feet; two stories; mill construction; one freight elevator, 5000 pounds capacity, electric drive; plans by G. Lloyd Preacher, Augusta; later will install milling outfit with system of elevators and sacking outfit.

Ga., Dalton.—Barrett, Denton & Lynn Company will erect warehouse, 100x160 feet, to replace burned structure; concrete construction, including concrete floors and roof; estimated cost \$9000.

Ga., Macon.—Southern Bonded Warehouse Co. will be organized with about \$100,000 capital stock by R. J. Taylor, J. F. Heard, Howard M. Smith and others; erect 40,000-bale cotton warehouse. (Recently mentioned.)

Md., Baltimore.—Zimmerman Bros., 613 West Lexington St., have plans by B. W. & E. Minor, 224 West Pratt St., Baltimore, for warehouse at 613 West Lexington St.; two stories; brick; 20x70 feet; store front; cost \$4225.

N. C., Rocky Mount.—American Tobacco Co. (main offices New York) will erect warehouse with storage capacity of 1000 to 1500 hogsheds of tobacco.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Fla., Jacksonville.—George A. Light awarded contract to O. P. Woodcock, Jacksonville, for erection of apartment-house; three stories; stone, brick and wood; colonial style; veranda front and rear; gas and electric lights; speaking-tubes; 12 to 15 apartments.

Va., Norfolk.—F. M. Killin awarded contract to C. F. Overmeyer, Norfolk, for erection of apartment-house; brick; cost \$5000.

W. Va., Charleston.—Ben Baer awarded contract to W. S. Garden (address care of Mr. Baer) for erection of apartment recently noted; two stories and basement; brick; hot-water heat; gas and electric lighting; cost \$20,000; plans by Steinman, Bros., Cincinnati, O.

W. Va., Wheeling.—A. A. Wheat awarded contract to A. N. Wallace, Woodlawn, O., for erection of apartment-house in Edgewood.

ASSOCIATION AND FRATERNAL

Ala., Alexander City.—Ancient Free and Accepted Masons awarded contract for erection of three-story Masonic temple; 70x60 feet; fireproof construction; electric lighting; V. B. Durden, Alexander City, contractor.

Va., Pulaski.—Benevolent and Protective Order of Elks awarded contract at \$27,250 to Oscar Laughon, Pulaski, for erection of lodge, store and opera-house building; frontage 125 feet; red brick; 18-inch outside walls; opera-house (50x100 feet) cut off from rest of building by solid fire wall running from ground to roof; brown pressed-brick trimmings; steam heat; plans by Huggins & Bates, Roanoke, Va. (Recently mentioned.)

BANK AND OFFICE BUILDINGS

Ala., Corey.—Corey Land Co., Robert Jemison, Jr., president, 2024 3d St., Birmingham, Ala., awarded contract to C. M. Allen, Birmingham, Ala., to erect bank and hotel building; first floor to be occupied by First Bank of Corey; also block of office and store buildings; structures to be 30x110 feet and two stories; cost about \$25,000 each; plans by Warren & Welton, Birmingham, Ala. (Recently mentioned.)

Tenn., Chattanooga.—F. M. Catron awarded contract to A. F. Hahn Building Co., Chattanooga, for remodeling Marble Hall, 817 Market St., as office building; offices to be occupied by Southern Railway Co.; cost \$5000; plans by R. H. Hunt, James Bldg., Chattanooga. (Recently noted.)

Ark., Buckner.—Lafayette County Bank awarded contract to John C. Pennington, Lewisville, Ark., for erection of proposed bank building; cost \$13,264.

S. C., Furman.—Farmers and Merchants' Bank awarded contract to G. B. Clark, Estill, S. C., for erection of proposed bank building; 22x40 feet; fireproof construction; cost \$3000.

CHURCHES

Ark., Little Rock.—St. Edwards Roman Catholic Church, Father Morris, pastor, will expend \$30,000 for improvements to interior of edifice; Gothic ornamental plastered ceiling supported on steel frame and steel lath; electric lighting; plans by H. J. Harker, Little Rock; contract recently noted awarded to W. H. Harris, P. O. Box 462, Little Rock.

Ark., Newport.—Methodist church awarded contract at \$13,396 to J. C. Herron of Newport to erect edifice; gray pressed brick; auditorium 50x56 feet; Sunday-school room 30x67 feet; 12 classrooms, etc.

Ky., Winchester.—St. Joseph's Catholic Church awarded contract at \$10,727 to N. A. Powell of Winchester to erect edifice; contract does not include heating and lighting fixtures; total estimated cost \$15,000.

Mo., Kansas City.—First German Baptist Church awarded contract to Albert Linder, 123 Bates Ave., Kansas City, for erection of edifice; 54x42 feet, with parsonage 32x25 feet; ordinary construction; steam heat; gas and electric lighting; cost \$10,000; plans by B. H. Brooks, 521 Keith Bldg., Kansas City. (See "Machinery Wanted.")

S. C., Charleston.—Church of Holy Rosary, Rev. J. F. Mahoney, pastor, awarded contract to J. F. Hawley (address, care of Rev. J. F. Mahoney) for erection of edifice recently noted; 60x100 feet; ordinary construction; Gothic style of architecture; cost \$8300; plans by D. C. Barbot, Charleston.

S. C., Florence.—Commercial and Savings Bank will expend \$11,000 to remodel bank building; 25x71 feet; electric lighting; heating plant to cost \$350; plans by W. J. Wilkins (address, care of bank); contract recently noted awarded to T. B. Haynesworth, Florence.

Tenn., Memphis.—Westminster Presbyterian Church, Rev. J. C. Mallory, D.D., pastor, awarded contract to D. Emmons & Co., Memphis, for erection of edifice recently noted; plans by Shaw & Pfeil, Memphis; cost of entire building, \$40,000; all contracts let.

Va., Salem.—Shiloh Baptist Church is having plans revised by G. R. Ragan, architect, Salem, for proposed edifice; brick cased; cost \$4500 to \$5000; contract awarded to Central Manufacturing Co., Roanoke, Va.

CITY AND COUNTY

La., Grand Cane.—DeSoto parish awarded contract to Nicholas Construction Co., Grand Cane, for erection of main fair building.

Md., Brunswick.—City Hall.—City awarded contract for erection of city hall; basement story of concrete. Address The Mayor.

Tenn., Memphis.—Workhouse.—Shelby County Commissioners, S. H. Cooper, secretary, awarded contract at \$6400 to Pauly Jail Building Co., St. Louis, for improvements to workhouse, including equipping throughout with new iron. (Previously mentioned.)

COURTHOUSES

Va., Covington.—Allegheny County Commissioners awarded contract at \$42,942 to George Leigh & Bros., Louisa, Va., for erection of courthouse. (Previously noted.)

DWELLINGS

Ark., Little Rock.—E. D. Bracy awarded contract to E. T. Collins, Little Rock, for installing steam-heating plant and electric light fixtures for \$3500 residence; contract for dwelling recently noted awarded to A. C. Larr, Little Rock.

Ga., Atlanta.—Peters Land Co., 610 Peters Bldg., awarded contract to F. B. Crowell (address care of company) for erection of dwelling recently noted; two stories; ordinary construction; hot-air heat; cost \$6500; plans by Morgan & Dillon, Atlanta.

Ga., Savannah.—W. T. Knight awarded contract to Madrid Cox, Savannah, for erection of residence; concrete construction; cost \$7000.

Ga., Savannah.—H. C. Daniels awarded contract to Jacob S. Collins, Savannah, for erection of residence; two stories; cost \$5000; plans by Walter M. Collins, Savannah.

Md., Chevy Chase.—T. A. Poole, 932 14th St. N. W., Washington, D. C., awarded contract to John Simpson's Sons, Chevy Chase, for erection of 35x40-foot dwelling and 25x30-foot garage; mill construction; cost \$12,000; plans by F. A. Fletcher, 1413 G St. N. W., Washington. (Recently noted.)

Md., Chevy Chase.—David Fairchild, 1331 Connecticut Ave. N. W., Washington, D. C., awarded contract to G. Walter Tovell, 329 Dolphin St., Baltimore, Md., for erection of residence; plans by Edward C. Denn, Union Trust Bldg., Washington, D. C., and Bayard Turnbull, 8 North Charles St., Baltimore, Md. (Recently mentioned.)

Mo., Kansas City.—First German Baptist Church awarded contract to Albert Lindes, 1233 Bales Ave., Kansas City, for erection of parsonage; 32x25 feet. (See "Churches.")

Tenn., Brownville.—C. H. Forest will expend \$8000 to erect dwelling; 42x55 feet; two stories and basement; brick and stone veneer; hot-water heat; electric lighting; plans by N. M. Woods, Memphis, Tenn.; contract recently noted awarded to W. J. Taylor, Brownville.

Tenn., Chattanooga.—Nicholas S. Long, 120 B St., awarded contract to A. F. Hahn Building Co., Chattanooga, for erection of proposed dwelling; eight rooms and basement; hard-pine interior finish; stone trimmings; cabinet mantels; gas and electric lighting; cost \$3600.

Tenn., Memphis.—T. O. Vinton awarded contract to Paterson & Son, Memphis, for erection of dwelling recently noted; 54x50x30 feet; ordinary construction; hot-water heat; electric lighting; cost \$13,000; plans by Hanker & Calrus, Memphis.

Tex., Mart.—J. R. Gillam will erect brick veneer residence; one and a half stories; 65x65 feet; electric lighting; cost \$7000; plans by Scott & Pearson, Waco, Tex.; contract awarded to Richardson & Vespermann, Mart.

Tex., Temple.—Emil Panchleria awarded contract for erection of store and dwelling. (See "Stores.")

Va., Petersburg.—Forrest Tucker awarded contract to J. C. Rowel (address care of Mr. Tucker) for erection of dwelling; cost \$2300; plans by M. P. Andrews & Co., Petersburg.

Va., Petersburg.—Mrs. J. T. D. Alton awarded contract to E. J. Andrews (address care of Mrs. Alton) for erection of proposed dwelling; cost \$3250; plans by M. P. Andrews & Co., Petersburg.

GOVERNMENT AND STATE

Miss., Hattiesburg.—Postoffice.—Newport Contracting & Engineering Co., Newport News, Va., has contract at \$69,455 to erect United States postoffice. (Recently mentioned.)

Mo., Fulton.—Hospital.—State Hospital for Insane awarded contract to Anderson & Lyberger, St. Louis, Mo., at \$32,470 to erect tuberculosis sanitarium, and to Fisher & Neal of Fulton at \$2100 for plumbing; Root & Slemmons, Scarritt Bldg., Kansas City, Mo., prepared plans. (Recently noted.)

N. C., Concord.—Postoffice.—Joseph Seay & Co., Petersburg, Va., have contract at \$51,200 to erect United States postoffice; size 50x80

feet; one story; fireproof. (Recently mentioned.)

S. C., Aiken.—Postoffice.—A. B. Stannard of New York has contract, it is reported, at \$45,618 to erect United States postoffice. (Recently mentioned.)

Tex., Taft.—Home.—State Board of Public Affairs, Guthrie, Okla., awarded contract to J. T. Hosmer, Muskogee, Okla., to erect two-story brick administration, dormitory and recitation building for Colored Deaf and Blind Home; contract price \$29,221.

Va., Lynchburg.—Hospital.—Government awarded contract to J. L. Walker, Madison, Va., to erect first building on property of State Epileptic Colony in Amherst county, near Lynchburg; 86x116 feet; brick; ordinary construction; low-pressure steam heat; electric lighting; estimated cost \$25,000; plans by Frye & Chesterman, Lynchburg. (Recently mentioned.)

HOTELS

Ala., Corey.—Corey Land Co., Robert Jemison, Jr., president, 2024 3d St., Birmingham, Ala., awarded contract to C. M. Allen, Birmingham, for erection of hotel and bank building; hotel portion on second floor to contain 50 rooms and bath. (See "Bank and Office Buildings.")

Ga., Atlanta.—Joseph Gatins, Jr., New York, will expend \$700,000 (not \$400,000, as recently noted) on apartment hotel of fireproof construction previously described; contractor, Geo. A. Fuller Company, 907 Munsey Bldg., Washington, D. C.; plans by W. L. Stoddard, 30 West 38th St., New York.

Okla., Tulsa.—Tulsa Hotel Building Co. awarded contract for erection of 10-story hotel; finished inside in marble; balconies extending entirely around exterior; 300 rooms with bath and 200 without. (Previously mentioned.)

Tex., Dallas.—A. W. Campbell awarded contract to Standard Construction Co., Dallas, for erection of hotel; five stories; concrete; fireproof; cost \$85,000; plans by Lang & Witcheil, Dallas. (Recently mentioned.)

MISCELLANEOUS STRUCTURES

N. C., Raleigh.—York & Cobb, Raleigh, have contract for erection of clubhouse for Raleigh Country Club; frame construction; cost \$15,000.

Tex., Eagle Lake.—Postoffice.—Lee Hughes will erect postoffice building; brick; contract awarded.

W. Va., Piedmont.—Clubhouse.—West Virginia Pulp & Paper Co., 200 Fifth Ave., New York, awarded contract to Andrew Kneil, Jr., 215 St. Paul St., Baltimore, Md., to erect clubhouse; steel frame and concrete walls; 45x35 feet; three stories; hand-power dumb-walker; cost \$35,000. Haskell & Barnes, 301 North Charles St., Baltimore, Md., prepared plans.

RAILWAY STATIONS

S. C., Ridgeville.—Southern Railway Co., W. W. Finley, president, 1300 Pennsylvania Ave., Washington, D. C., awarded contract to Porter & Boyd, Charlotte, N. C., for erection of combination depot. (See "S. C., Windsor.")

S. C., Windsor.—Southern Railway Co., W. W. Finley, president, 1300 Pennsylvania Ave., Washington, D. C., awarded contract to Porter & Boyd, Charlotte, N. C., for erection of proposed combination depots at Windsor and Ridgeville, S. C.; wood construction; cost \$6000.

SCHOOLS

Ala., Mobile.—Emerson Institute will erect normal building; William Barnard Smith, professor in charge; structure will be 52x30 feet; two stories; ordinary construction; hot-air or steam heat; electric lighting; cost \$2500; plans by Frederick Kloefer, Mobile; contract awarded to A. E. Lufboro, Tuscaloosa, Ala. (See "Machinery Wanted.")

Ala., Mobile.—Mobile Medical College awarded contract to Jett Bros. Contracting Co., Mobile, for erection of proposed addition; one story; ordinary construction; cost \$3050; plans by R. Benz & Sons, Mobile.

Ala., Mobile.—School Commissioners awarded contract at \$14,000 to Jett Bros. Contracting Co., Mobile, for erection of Leinkauf school; four rooms and auditorium. (Recently mentioned.)

Ark., McNeill.—McNeill Special School District will expend \$28,854 to erect high-school building; 96x128 feet; fireproof construction; pressed brick; plans by C. M. Daniels, St. Louis, Mo.; contract recently noted awarded to John C. Pennington, Lewisville.

Fla., St. Petersburg.—City awarded con-

tract at \$22,035 to W. C. Henry of St. Petersburg for erection of high-school building; 70x130 feet; hot-air heat; electric lights; plans by Bonfoey & Elliott, Tampa, Fla. (Previously mentioned.)

Mo., Fayette.—Howard Payne College, H. E. Stout, president, awarded contract to Charles Fisher, Fayette, for erection of proposed \$35,000 school building.

S. C., Chester.—City will expend \$15,000 to erect school building; six classrooms, auditorium; office; T-shape; 68x78 feet; brick; slate roof; steam heat; electric lighting; plans by Sayre & Baldwin, Anderson, S. C.; contract recently noted awarded to Carpenter & Wylie, Chester.

S. C., Hopkins.—School District No. 2, Richland county, has plans by Shand & Lafaye, Columbia, S. C., for school building; two stories; cost \$7000; contractor, Mr. Scott, Hopkins; equipment contract awarded; construction begun.

S. C., Lowryville.—Through J. S. Starr, architect, Rock Hill, S. C., contract has been awarded to Setzer & Moser, Hickory, S. C., for erection of \$4000 high-school building recently noted; four 18x20-foot classrooms, hall, cloakrooms, etc.; one rolling partition; metal roof.

Tenn., Germantown.—City awarded contract at \$13,900 to J. H. Moselege, Memphis, Tenn., for erection of school; plans by Jones & Furbinger, Memphis, Tenn.

Tex., Amarillo.—School Board awarded contract to H. W. Hoel Building Co. for erection of two-story-and-basement high-school building recently described; mill construction; cost \$50,000; plans by D. P. Kaufman & Son, Amarillo.

Tex., Benjamin.—Common School District No. 1, Knox county, awarded contract to Myers & Rogers, Benjamin, for erection of school building recently noted; 10 classrooms, office and assembly hall; two stories and unfinished basement; 78x135 feet; ordinary construction; buff brick trimmed in gray; stone columns; steam heat; acetylene-gas lighting; cost \$22,000; plans by Perry & Spicer, Sweetwater, Tex.

Tex., Houston.—William M. Rice Institute, Edgar Odell Lovett, president, awarded contract at \$319,478 to William Miller & Sons Company, Pittsburg, Pa., for erection of administration building; three stories; pink Tennessee marble and Enfield brick; reported cost between \$400,000 and \$500,000; plans by Cram, Goodhue & Ferguson, Boston, Mass., and New York. (Recently noted.)

Tex., Eagle Lake.—City will expend \$20,000 to erect school building; 80x100 feet; stoves; plans by Green & Briscoe, Houston, Tex.; contract recently noted awarded to G. W. Keith, Eagle Lake.

Tex., Roby.—Board of Education, T. H. Mayfield, president, awarded contract to W. C. Whitney, Beaumont, Tex., for erection of school building. (Recently noted to have voted \$16,000 bond issue.)

Tex., San Benito.—Board of trustees, C. E. Barber, president, awarded contract to L. Fleming, San Benito, for erection of proposed schoolhouses; one of two stories, 155x75 feet; one one story, two rooms; ordinary brick construction; furnaces; electric lighting; cost \$16,750 and \$3500, respectively; plans by Endress & Walsh, Austin, Tex. (See "Machinery Wanted.")

Va., Norfolk.—Norfolk County School Board awarded contract at \$7945 to R. E. Ralford, Norfolk, for erection of eight-room brick school near Freitas' store; slate roof; plans by W. T. Zipp, Norfolk. (Recently mentioned.)

W. Va., Parkersburg.—Board of Education awarded contract at \$1900 to L. C. Polling, Parkersburg, for laying Bedford stone foundation for school at Park Ave. and 7th St.; 12 rooms; slow-burning; pressed brick; stone trimmings; cement basement; cost \$28,000 to \$30,000; plans by Patton & Daly, Parkersburg. (Recently mentioned.)

STORES

Ala., Corey.—Corey Land Co., Robert Jemison, Jr., president, 2024 3d St., Birmingham, Ala., awarded contract to C. M. Allen, Birmingham, for erection of store and office building. (See "Bank and Office Buildings.")

Ark., Buckner.—Hanson Bros. awarded contract to John C. Pennington, Lewisville, Ark., for erection of proposed business building; three stories; 50x140 feet; pressed brick; cost \$18,928.

Ark., Hamburg.—D. W. Watson awarded contract to Nolley Bros., Hamburg, for erection of building.

Fla., Sanford.—N. P. Yowell & Co. awarded contract to Geo. Venable, Sanford, for erection of store building recently noted; fire-

proof construction; electric lighting; cost \$12,000; plans by W. B. Tallie, Jacksonville, Fla.

Ga., Statesboro.—Cecil W. Brannen awarded contract to E. R. Blackburn, Statesboro, for erection of store building recently noted; 80x60 feet; two stories; ordinary construction.

Miss., Meridian.—Melton Hardware Co. awarded contract to C. M. Rubush, Meridian, for erection of store building previously noted under "Miscellaneous Structures;" 60x150 feet; mill construction; will install elevator to cost \$1600; cost of building \$20,000; plans by P. J. Krouse, Meridian.

S. C., West Union.—Strother & Phinney awarded contract to Otto Kaufman, Walhalla, S. C., for erection of store building recently noted; 30x120 feet; fireproof construction; cost \$3000.

Tenn., Brownville.—S. Turner and L. M. Short awarded contract to W. J. Taylor, Brownville, for erection of proposed double store building; 60x100 feet; two stories and basement; brick and stone; plate-glass front; cost \$11,500.

Tex., Houston.—Mrs. George Heyer awarded contract to Pearson & Co., Houston, for erection of business building; four stories; reinforced concrete; fireproof; 23x100 feet; cost \$22,000; plans by R. D. Steele, Houston.

Tex., Karnes City.—Kuhnell & Rezeppa awarded contract to McCall & Warnke, Karnes City, for erection of brick store.

Tex., Palacios.—B. F. Hatchell, Crockett, Tex., awarded contract to Cox & Kirkpatrick, Palacios, for erection of one-story brick building.

Tex., Sabinal.—L. M. Peters has plans by and awarded contract to S. T. Hutchinson, Sabinal, for erection of store building recently noted; 80x70 feet; ordinary construction; electric lighting; cost \$6800.

Tex., Temple.—Emil Panchleria awarded contract for erection of two-story brick store and dwelling.

Tex., Yoakum.—J. M. Haller awarded contract to Rose & Shall, Yoakum, for erection of store building recently noted; to contain five stores; 25x30 feet each; brick; cost \$11,000; plans by J. Henry Yeutzan (address care of Mr. Haller).

Va., Lynchburg.—Mrs. Rose awarded contract for erection of store building; three stories; plans by Frye & Chesterman, Lynchburg.

Va., Petersburg.—Harrison Construction Co., Petersburg, has contract for erection of four brick stores; three stories.

THEATERS

Tex., Eagle Lake.—Lee Hughes awarded contract for erection of brick opera-house.

WAREHOUSES

Ga., Columbus.—Mrs. K. B. Banks awarded contract to M. C. Barlow, 413 11th St., Columbus, for erection of addition to warehouse; fireproof construction; cost \$7800; plans by C. W. Smith, Columbus. (Recently noted.)

N. C., Greenville.—American Tobacco Co., New York, awarded contract to York & Cobb, Raleigh, N. C., for erection of storage sheds at Greenville, Winston-Salem and Rocky Mount, N. C.; cost \$2500 each. (Recently noted.)

N. C., Rocky Mount.—American Tobacco Warehouse Co., New York, awarded contract to York & Cobb, Raleigh, N. C., for erection of storage shed; cost \$2500. (See Greenville, N. C.)

N. C., Wilmington.—Wilmington Compress & Warehouse Co. awarded contract for erection of warehouse; 450 feet long; cost \$30,000.

Va., Richmond.—Standard Paper Manufacturing Co. awarded contract to J. T. Nickols of Richmond at \$20,575 to erect two-story brick warehouse; plans by Carneal & Johnson of Richmond. (Recently mentioned.)

N. C., Wilmington.—Wilmington Compress & Warehouse Co. awarded contract to Joe Schad, P. O. Box 81, Wilmington, for erection of warehouse recently noted; 59 feet 6 inches by 450 feet; brick and frame; cost \$30,000. (See "Machinery Wanted.")

N. C., Winston-Salem.—American Tobacco Co., New York, awarded contract to York & Cobb, Raleigh, N. C., for erection of storage shed; cost \$2500. (See Greenville, N. C.)

Tex., Texas City.—Texas City Transportation Co. awarded contract to Eureka Construction Co., Tulsa, Okla., to floor seven warehouses recently built; three-inch concrete floor covered with 1½ inches of asphalt; estimated cost \$50,000.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Selma.—George H. Clark of Birmingham is reported investigating a route for the proposed Selma Mineral Railroad along the Cahaba Valley to Birmingham, 75 miles. Julien Smith and others of Selma are interested. Mr. Clark is reported as saying that he believes the line will be constructed.

Ark., Harrison.—An officer says that the Fort Smith, St. Louis & Chicago Railroad Co. proposes to build 100 miles of line from Fort Smith to Bergman, Ark. Route is through rolling country. No date yet set to receive bids. The officers are L. S. Powers, president; H. H. Tittmann, St. Louis, Mo., vice-president; W. A. Richardson, chief engineer, Harrison, Ark.

Ark., Hot Springs.—Henry Dalhoff of Little Rock, Ark., has, says a dispatch, proposed to the Business Men's League of Hot Springs to build a railroad 17 miles long westward toward Mena, Ark., for a subscription of \$35,000. It is also proposed to build another line northeast 14 miles to Mountain Valley Springs.

Ark., Texarkana.—W. L. Wood, Jr., manager of the Texarkana Gas & Electric Co., according to a dispatch, is conferring with the Daves syndicate of Chicago regarding a proposed interurban railway to connect Texarkana, Hope and Hot Springs, Ark.

Fla., Fort Pierce.—The Sebastian & Fellems Farm Railroad Co. is reported organized to rebuild a railroad from Sebastian through the Russell lands and to make other improvements. Capital \$2,000,000. The Mayor may be able to give information.

Ga., Atlanta.—Construction will begin, according to a dispatch, within two months on the proposed Atlanta & Carolina Electric Interurban Railway from Atlanta, via Athens, to Augusta, Ga., about 200 miles, which plan is backed by Capt. J. W. English of Atlanta and others. He is president.

Ga., Dalton.—F. T. Reynolds, secretary of the Chattanooga (Tenn.) Chamber of Commerce, is quoted as saying that the proposed electric railway will be built between Chattanooga and Dalton, and that maps have been made.

Ga., Gainesville.—Press dispatches state that Northern and Western capitalists will make large investments in timber in Northeast Georgia and perhaps build a railroad north from Gainesville to either Blue Ridge, Ga., or Murphy, N. C., 55 or 60 miles. Among those reported interested are Congressman Thos. M. Bell of Gainesville, Ga.; J. A. Finch of Washington, D. C.; Congressman William E. Cox of Jasper, Ind., and W. A. Winburn, vice-president of the Central of Georgia Railway at Savannah, Ga.

Ga., Lyons.—The Wrightsville, Adrain & Lyons Railway Co. has amended its charter, increasing the capital from \$100,000 to \$1,000,000, and providing for an extension from Wrightsville to Milledgeville, through Washington and Baldwin counties. In the other direction the line will run from Lyons to Brunswick, Ga. At present six miles have been graded. Address, Lyons, Ga.

Ga., Vidalia.—The Vidalia & Southeastern Railroad Co. has applied for charter for a line from Vidalia, on the Seaboard Air Line, via Reidsville, Glenville and Hinesville, to Fleming, Ga., on the Atlantic Coast Line, about 60 miles. The incorporators are F. K. Durden, H. J. Banks and J. V. Kelly of Vidalia, W. Y. McArthur, R. M. Garbutt, C. W. Braswell, A. Y. Garbutt, Montgomery; J. W. Poe, W. T. Jenkins, W. O. Donovan, Tattall, and E. C. Miller, Liberty county.

Ky., Covington.—The Covington, Big Bone & Carrollton Railway Co. has given bond for \$25,000. It is reported, to guarantee completion of its line in Covington, which is to be extended to Big Bone Springs, 22 miles. The incorporators are J. J. Weaver of Ludlow, Ky.; Orlando P. Schmidt, R. S. Holmes, Louis Fritz and Joseph Feltman, all of Covington, Ky.

Ky., Frankfort.—John Blair MacAfee, president of the Central Kentucky Traction Co., 3d and Walnut Sts., Philadelphia, says that it is not at the moment contemplating any further extension. This refers to a proposed electric railway from Frankfort to Owenton, Ky., in which Charles E. Hoge of Frankfort is interested. The Traction Company has just completed a road from Lexington to Nicholasville.

Ky., Louisville.—The Louisville & Nashville Railroad, it is reported, will spend \$100,000 to build another line to Lagrange, Ky. W. H. Courtenay is chief engineer at Louisville, Ky.

La., Forest.—S. Taylor Jackson is reported to have completed a survey for Frank Jones, who will build a railroad to timber lands, upon which construction will soon begin.

La., Franklin.—The Franklin & Abbeville Railway has completed its extension from New Iberia to Milton, La. It is possible that a further extension of 13 miles will be made to Lafayette. W. Y. Kemper is chief engineer at Franklin, La.

La., New Iberia.—The Iberia, St. Mary & Eastern Railway, advises an officer, will build 52 miles of line from New Iberia via Franklin and Jeanerette to Morgan City, La., including two drawbridges of 150-foot span over the Bayou Teche. Route level. Not yet ready to let contract. F. M. Welch is president; H. N. Pharr, treasurer; H. A. Genung, chief engineer, all of New Iberia.

Md., Cumberland.—The Western Maryland Railway Co. has let contract to the McClintic-Marshall Construction Co. of Pittsburgh for bridges on its Connellsville extension, requiring about 12,000 tons of steel. H. R. Pratt is chief engineer at Baltimore, Md.

Md., Cumberland.—The Western Maryland Railroad Co. is reported to have completed plans for additional freight yards at West Virginia Central Junction. Six new tracks are to be built. H. R. Pratt is chief engineer at Baltimore, Md.

Md., Cumberland.—The George Vang Company of Cumberland has been given a sub-contract of five miles of grading on the Western Maryland extension between Mt. Savage and the Pennsylvania State line.

Miss., Jackson.—The New Orleans Great Northern Railroad is reported to have announced that it will build its extension of six miles into Jackson and to a point about two miles north of the city. N. G. Pearsall is general manager at Bogalusa, La.

Mo., Deering.—The Deering Southeastern Railway, says an officer, proposes to build a line from Deering to Caruthersville, Mo., about 13 miles; also from Camp to Hornersville, about seven miles. Route lies through level country, partly in timber. F. B. Montgomery is president and general manager, Harvester Bldg., Chicago, Ill.

Mo., St. Joseph.—The St. Joseph & Savannah Interurban Railroad Co., it is reported, has let contract to the J. L. Flick Construction Co. of Chicago for its line from St. Joseph to Savannah, Mo., 15 miles. C. F. Campbell is chief engineer at St. Joseph.

Mo., St. Louis.—A dispatch from New York announces that the Missouri, Kansas & Texas Railway has sold to Speyer & Co. \$10,000,000 of 5 per cent, 1-year notes to finance its new terminals in St. Louis and for other purposes. S. B. Fisher is chief engineer at St. Louis, Mo.

N. C., Hendersonville.—Bryson & Hamilton are reported to have been awarded contract to build a railroad three miles long from Rosman up the middle fork of the French Broad River. H. G. Bailey is engineer in charge for E. A. Schaffer of Pennsylvania, the owner.

Okla., Enid.—President W. S. Whittinghill of the Enid & Central Oklahoma Traction Co. is quoted as saying that arrangements to finance the line by Lloyd-Ellinger, Ltd., of London, England, are nearing completion.

Okla., Gotebo.—An official letter of the Gotebo & Southwestern Railway Co. says that final survey is being made from Gotebo to Lawton, Okla., and construction will be started. Headquarters at 408 New York Life Bldg., Kansas City, Mo.

Okla., Lawton.—Notice is reported received from Oscar Ayres, president of the Arbuckle & Western Railroad, Ardmore, Okla., that bonds have been sold and the line will be built immediately from Ardmore to Lawton.

Okla., Miami.—Preliminary surveys are reported complete for the interurban electric railway promoted by M. C. Harper of Kansas City to connect Miami, Hattonville and other points in Oklahoma with Baxter Springs, Columbus and other points in Kansas, and Joplin, Mo. Construction is to begin in two months.

Okla., Pawhuska.—J. H. Brewster, president of the Continental Construction Co., Independence, Kans., desires to hear from material men preparatory to laying track on the Cherryvale, Oklahoma & Texas Railway, under construction.

Tenn., Franklin.—The Middle Tennessee Railroad, it is reported, contemplates construction of an extension to Mt. Pleasant, Tenn., 18 miles. John H. Carpenter is president; J. W. Howard, vice-president; Mead Frierson, general manager, and R. G. Sparrow, secretary and treasurer.

Tex., Abilene.—A mass-meeting of citizens has approved the contract with Morgan Jones to build a railroad from Abilene via Hodges, Truby and Anson to Hamlin, Tex., and work will begin soon, the contract to be completed by January 1 and the line to be in operation by October 1 of next year. Grading is al-

ready under way from Anson to Hamlin, as that line is to be completed this fall.

Tex., Beaumont.—H. J. Meyers, president of the Port Arthur Traction Co., has applied for a franchise for an interurban electric railway between Beaumont and Port Arthur.

Tex., Brady.—The St. Louis & San Francisco Railroad, says a dispatch from San Antonio, is surveying for a line from Brady via San Antonio to Kingsville, Tex. M. C. Byers is chief engineer at St. Louis, Mo.

Tex., Brownsville.—A. T. Perkins of St. Louis, vice-president of the St. Louis, Brownsville & Mexico Railway, is quoted as saying that the company will soon begin work on the contemplated extension from Brownsville to sugar-cane lands in the valley below the city.

Tex., Quanah.—S. F. Dunham, engineer in charge, says a dispatch, is pushing survey for the Quanah, Seymour & Dublin Railway between the Pease River and Seymour, the object of the line being to reach Rockport, Tex., on the Gulf of Mexico.

Tex., De Leon.—An officer of the Texas Central Railroad is quoted as saying that grading is about 75 per cent. completed, and tracklaying is under way on the branch from De Leon via Sipe Springs and Rising Star to Cross Plains, 21 miles. Work is not yet begun on the extension from Rotan.

Tex., Del Rio.—The Manufacturers' Record is officially advised that the Kansas City, Mexico & Orient Railway has closed a deal for the sale of \$5,000,000 of bonds to London bankers, and the proceeds will be used to complete its Del Rio line and the main line to Fort Stockton. This will give direct connection to Mexico City. W. W. Colpitts is chief engineer at Kansas City, Mo.

Tex., Hillsboro.—A dispatch says that a movement is under way to build an electric railway from Hillsboro to Whitney, Tex., 12 miles. The Mayor may be able to give information.

Tex., Llano.—Officers of the Southern Pacific are reported investigating for a possible extension from Llano to Sanderson, Tex., 250 miles, although at first only 75 miles, to connect with the Frisco system, may be built. E. B. Cushing is engineer of construction at Houston, Tex.

Tex., Plainview.—The Santa Fe, according to a report quoting an officer, has construction under way on a branch from a point 16 miles southeast of Lubbock, Tex., to La Mesa, Tex., 55 miles, as well as on the cut-off from Coleman to Lubbock, 200 miles. The lines from Plainview to Lubbock, 45 miles, and from Plainview to Floydada, 27 miles, are being operated.

Tex., Sweetwater.—Roach & Stansell of Memphis, Tenn., are reported to have been given another contract for 25 miles of grading on the Kansas City, Mexico & Orient Railway, this being out of Stockton, Tex. The firm is already grading on other contracts for the company, which amount to a total of 100 miles.

Va., Falls Church.—President M. E. Church of the Washington-Virginia Railway Co., recently chartered, advises the Manufacturers' Record that the proposed line will be 50 miles long from Bluemont to Vienna, Va., via Leesburg or Aldie. The route is through rolling country. The other officers are: Vice-president, George B. Fadeley; treasurer, L. L. Northrup; secretary, F. E. Parker, the other directors being O. B. Livingston, A. C. Houston and T. M. Talbott, all of Falls Church. President Church is also general manager.

Va., St. Paul.—The Carolina, Clinchfield & Ohio Railway is reported to have put in operation the Dumps Creek line from St. Paul to Hurricane, Va., 12 miles.

W. Va., Alexander.—President J. H. Henderson of the Croft Lumber Co. says that the Croft Railroad Co. was incorporated only to take over a short logging line already constructed, and not to build a new road.

W. Va., Dobbin.—The Parsons Pulp & Lumber Co. of Dobbin will, it is reported, extend its railroad about 30 miles. E. O. Abernathy is superintendent. He says that the line is now about 19 miles long. Several miles will be added.

W. Va., Fairmont.—The Four States Coal & Coke Co. is reported to have let contract to build a railroad three miles long to Curtis, Shumway & Deane of Lynchburg, Va., who have begun preliminary work.

W. Va., Fairmont.—The State Line & Southern Railroad Co. of Fairmont, which, as previously reported, will build a line 13 miles long from Rivesville, W. Va., to the Pennsylvania State boundary, has, according to a dispatch, organized thus: President, Joseph Wood of Pittsburgh, Pa.; vice-president and chief engineer, Samuel D. Brady of Parkersburg, W. Va.; secretary, Charles Morris;

general counsel, Gen. W. S. Meredith, both of Fairmont, W. Va.

W. Va., Gassaway.—The Elk & Little Kanawha Railroad Co. is reported to have let contract to J. J. Boxley & Son of Roanoke, Va., to build its narrow-gauge railroad from Gassaway via Frametown to Rosedale, W. Va., 22 miles, to develop timber lands of the Interstate Cooperation Co. Construction is to begin immediately, and is to be completed by January 1 next.

W. Va., Logan.—The Cole & Crane Company, it is reported, has begun construction of a railroad 10 miles long up Buffalo Creek.

W. Va., Sistersville.—T. M. Jackson is reported to have begun survey on the proposed electric railway from Sistersville to Middlebourne, W. Va.

W. Va., Weston.—Construction is reported begun on the first section of the Clarksburg & Weston Electric Railway, namely from Clarksburg to Byron, seven miles, which will be built by the fall. Joe Fucy has the grading contract, as previously reported.

STREET RAILWAYS

La., New Orleans.—President Hugh McCloskey of the New Orleans Railway & Light Co. has bought the franchise of the Spanish Fort extension of the West End Railroad, and the line will be built, including a bridge over Bayou St. John.

Okla., Oklahoma City.—The Oklahoma Railway Co. has completed its line to Moore, seven miles; also the line to Yukon, 16 miles.

Tex., San Angelo.—The San Angelo Street Railway Co. contemplates building an extension south and west in the city. E. E. Bailey is vice-president.

Tex., Sweetwater.—A street-railway franchise is reported granted to C. M. McLain, G. E. Romsey and W. E. Barrow, all of Sweetwater.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery and supplies wanted.

Air Compressor.—See "Quarrying Machinery."

Blackboards.—New Sutherland Springs Independent School District, T. C. Richardson, secretary, Sutherland Springs, Tex., wants prices on blackboards.

Boiler.—L. L. Hayman, Elizabeth City, N. C., wants second-hand 60-horse-power boiler.

Boilers.—John C. Duncan Company, 308 West Jackson Ave., Knoxville, Tenn., wants prices on one 60x16, one 60x16 and one 54x16 return-tubular boiler with fixtures complete; half arch or full-front arch; immediate delivery.

Bottles.—Dallas Distilled Water Co., H. L. Dreyer, president, Dallas, Tex., wants prices on half, two, three and five-gallon clear green glass bottles.

Brick.—Sayre & Baldwin, Anderson, S. C., want samples and prices on light pressed brick for \$20,000 school.

Bridge Construction.—John B. Ashe, County Auditor, Houston, Tex., will open bids July 15 for construction of bridge over Sims Bayou; plans and specifications on file in office of County Engineer.

Bridge Construction.—Taylor County Court, Grafton, W. Va., will receive bids until July 9 for construction of three bridges as follows: Across Berkeley Creek, 1 1/4 miles north of Webster, W. Va., 40-foot span; across Lost Run, six miles from Grafton, 40-foot span; across Buck Run, one mile from Flemington, 14-foot span; bids will be received on bridges for concrete arches, also for iron structures and reinforced concrete floors; plans and specifications on file in office of clerk of County Court; I. J. Thomas, County Road Engineer.

Bridge Construction.—Goliad County Commissioners, Goliad, Tex., will probably open

bids August 10 for construction of county line bridge; plans and specifications at offices of clerk at Gollad and Cuero, Tex.

Broom Machinery, etc.—M. R. Perry, Tallulah Falls, Ga., wants information and prices on equipment for small broom and brush plant utilizing broom corn.

Building Materials.—Fairmont Realty Co., 2560 West Fairmont Ave., Baltimore, Md., wants prices on lumber, mill work, decorative material and cabinet mantels.

Building Materials.—Albert Lindes, 1233 Bales Ave., Kansas City, Mo., wants prices on plastering, tin work, plumbing, etc.

Building Materials.—J. S. Starr, Rock Hill, S. C., wants samples and prices on materials for 4x52-foot addition to edifice; brick veneer structure; slate roof; metal ceiling; light brown press brick wall.

Cannery.—A. M. Delcambre & Co., Carrizo Springs, Tex., want addresses of manufacturers of or dealers in canning machinery.

Cars.—Jos. E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants open or closed street cars; good condition.

Clock-factory Equipment.—R. K. Luhr, Gheekanta, Lmda Pole, Baroda, India, wants complete plant for manufacturing clocks; about 125 daily.

Concrete Mixer.—Hobbs-Ives Equipment & Machinery Co., Norfolk, Va., wants prices on small second-hand concrete mixer with gasoline engine on trucks. (Footnote preferred.)

Crusher.—Alabama Stone & Ore Co., W. G. Robinson, president, Birmingham, Ala., wants prices on No. 7½ gyratory crusher.

Desks, etc.—New Sutherland Springs Independent School District, T. C. Richardson, secretary, Sutherland Springs, Tex., wants prices on desks and other school equipment.

Diamond Drill.—Albert L. Murray, 326 Fayetteville St., Raleigh, N. C., wants addresses of contractors who drill (with diamond drill) for coal and other minerals.

Drainage.—Directors Yellow Banks Drainage District, E. M. Allen, secretary, Helena, Ark., will receive proposals until July 15 for construction of two drainage ditches of about 700,000 cubic yards excavation in Phillips county; information furnished on application.

Drills.—See "Quarrying Machinery."

Electric-light Plant.—See "Water-works, etc."

Electric Lighting.—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until July 13 for special electric street illumination; specifications can be obtained at office of Robert J. McCuen, Superintendent of Lamps and Lighting, City Hall; certified check, \$200.

Electric-light Plant.—Northrup Manufacturing & Supply Co., C. E. Northrup, president, Thorsby, Ala., wants prices on 20-horse-power gas engine for operating electric lights; wants prices on wire, 200-light dynamo, 16-candle-power lamps and tungsten-light globes.

Electric-light Plants.—Western Assurance Co., Wallace, N. C., wants to correspond with manufacturers of and contractors for electric-light plants.

Electrical Machinery.—Penick & Ford, Ltd., New Orleans, La., want three generating outfits of 100, 75 and 50 kilowatts, respectively, 250 voltage; each to be operated by direct-connected engine of simple, four-valve or Corliss type.

Electrical Machinery.—Sealed proposals, endorsed "Proposals for Motor Generator Sets and Accessories," will be received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until July 16, and then and there publicly opened, for two 100-kilowatt synchronous motor generator sets, one 2½-kilowatt booster set and switchboard controlling equipment; plans and specifications can be obtained on application to bureau or to commandant of navy-yard; R. C. Hollyday, chief of bureau.

Electrical Machinery.—Calvert Carbonating Co., C. O. Scholander, president, Calvert, Tex., wants prices on electric motors.

Electrical Motors.—Welch Lumber Co., Welch, W. Va., wants prices on electric motors.

Elevating Machinery.—See "Oil-mill Equipment."

Engine.—Alabama Stone & Ore Co., W. G. Robinson, president, Birmingham, Ala., wants prices on 40-horse-power engine.

Engines.—See "Electrical Machinery."

Engine.—L. L. Hayman, Elizabeth City, N. C., wants second-hand 40-horse-power engine.

Engines.—John C. Duncan Company, 308 West Jackson Ave., Knoxville, Tenn., wants

prices on 75-horse-power Corliss or automatic stationary engines.

Filter Plant.—See "Water-works Equipment."

Fertilizer-Mixing Machinery.—Crawford Guano Co., Crawford, Ga., wants fertilizer-mixing machinery.

Flour Mill.—S. P. Storrs, Tallahassee, Ala., wants small mill for wheat flour.

Gas Engine.—Northrup Manufacturing & Supply Co., C. E. Northrup, president, Thorsby, Ala., wants prices on 20-horse-power gas engine for operating electric lights. (See "Electric-light Plant.")

Gasoline Engine.—J. L. Roark Estate, Greenville, Ky., wants catalogues and prices on 20-30-horse-power gasoline engine for touring car.

Gasoline-Lighting Machinery.—Southard Contracting Co., Lakeland, Fla., wants to correspond with manufacturers of gasoline machinery for illuminating residences, business places, etc.

Gasoline Engine, etc.—Crawford Guano Co., Crawford, Ga., wants gasoline engine or motor.

Gasoline Engine.—See "Water-works Equipment."

Gasoline Engine.—See "Quarrying Machinery."

Glove Machinery.—Raymond Land Co., Raymond, Ga., wants to correspond with manufacturers of glove machinery.

Grinding Machinery, etc.—Texas Cedar Chest Co., Paris and Sherman Sts., Dallas, Tex., wants grinding machinery, etc., to manufacture floor sweeping compound from cedar sawdust and shavings.

Heating Plant.—W. Barnard Smith, Emerson Institute, Mobile, Ala., wants prices on furnace for heating by hot air or steam.

Heating Plants.—Albert Lindes, 1233 Bales Ave., Kansas City, Mo., wants prices on heating plants.

Heating Plant.—G. W. McDaniel, secretary Church of The Brethren, Denton, Md., wants bids on steam-heating plant for concrete-block edifice; audience-room, 30x33 feet; Sunday-school room, 26x26 feet; 16-foot ceiling.

Holsting Engine.—D. H. Greene, Oriental, N. C., wants second-hand double-cylinder hoisting engine, single or double drum, about 7x10; state price, make, etc.

Ice-cream Machinery.—W. T. Winslett, 1341 15th St., Washington, D. C., wants addresses of manufacturers of ice-cream machinery.

Knitting Machinery.—Raymond Land Co., Raymond, Ga., wants to correspond with manufacturers of knitting machinery.

Laboratory Equipment.—C. E. Barber, president board of trustees San Benito Independent School District, San Benito, Tex., will receive bids on laboratory equipment.

Lighting Fixtures.—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until July 6 for furnishing gas and naphtha street-lamp fixtures and maintenance; specifications on file in office of Robert J. McCuen, Superintendent of Lamps and Lighting, City Hall; certified check, \$2000.

Letter Boxes.—William H. Oetgen, Savannah, Ga., wants catalogues and prices from manufacturers of house letter boxes; samples may be sent care of Postoffice Department, Savannah.

Levee Construction.—H. Burgess, Major, Engineers, U. S. Engineer office, 3338 St. Charles Ave., New Orleans, La., will open bids August 1 for construction of 334,000 cubic yards of earthwork in Lower Tensas Levee District; information on application.

Lighting Plants.—J. H. Johnson, Sumter, S. C., wants prices on gas and electric-light plants.

Lumber.—C. R. Williams, Silver Hill, N. C., wants addresses of red cedar manufacturers and dealers.

Mattress Machinery, etc.—Geo. R. Spencer, Opelika, Ala., wants information and prices on machinery for making cotton-felt mattresses and cotton comforts.

Miscellaneous Supplies.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until July 19 for furnishing manganese tumblers and rollers, bushings, lag and set screws, engine indicators, steam traps, hose couplings, etc.; blanks and general information relating to circular No. 593 may be obtained at above office or office of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 3086 North Point St., San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, De-

troit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Moss-Curing Machinery.—Texas Supply Co., Beaumont, Tex., wants prices on moss-curing machine; immediate shipment.

Motor.—See "Gasoline Engine, etc."

Oil-mill Machinery.—Allendale Cotton Oil & Fertilizer Co., Chas. Miner, superintendent, Allendale, S. C., wants prices on seed cleaning, elevating and power-transmitting machinery.

Paving.—Greenville Paving and Sewer Commission, W. E. Beattie, chairman, Greenville, S. C., will receive bids until July 23 for laying 29,000 square yards street paving (vitrified brick, wood block, bitulithic and asphalt), with necessary drainage and granite curb; each bid to be accompanied by certified check for \$2500; plans and specifications on file at office of consulting engineer, H. S. Jaudon Engineering Co., Savannah, Ga., or may be obtained by writing engineer at P. O. Box No. 61, Greenville.

Paving.—Board of Commissioners, Huntington, W. Va., will receive bids until July 25 for grading, draining, curbing and paving with vitrified brick, sheet asphalt, asphalt block or bitulithic paving on parts of Fourth, Seventh and Eighth Aves., 10th St., Van Buren Ave. and West 13th and 20th Sts.; approximately 55,000 square yards paving and 24,000 linear feet curbing, according to plans and specifications on file in office of A. B. Maupin, City Engineer; certified check for \$500; usual rights reserved; John Coon, Commissioner of Streets.

Paving.—Sam J. Brown, City Secretary, Amarillo, Tex., will open bids July 25 for construction of 80,000 square yards of pavement; each bidder to bid separately on bitulithic, vitrified brick, sheet asphalt, rock asphalt; each bid to be accompanied by certified check for \$1000, payable to City Treasurer; plans and specifications on file at City Secretary, Amarillo, and E. L. Dalton, engineer, Dallas, Tex.; extra copies of specifications to be sent out of town for personal use of bidders may be secured from engineer upon remittance of \$5.

Paving.—Mayor, Smithfield, N. C., will receive bids until July 12 for paving concrete sidewalks; plans and specifications on file at Mayor's office.

Paving.—J. B. Winslett, City Secretary, Dallas, Tex., will open bids July 11 for paving Elm St. from Ervay St. to Houston & Texas Central Railroad; each bidder to bid separately on creosoted-pine blocks and vitrified-brick blocks (on concrete base) and concrete curbs where necessary; certified check, \$500.

Paving.—L. G. Aymard, clerk Board of Public Works, City Hall, Pensacola, Fla., will receive bids until August 10 for construction of 525,000 square feet concrete sidewalks; specifications and blank proposal forms can be obtained at office of L. Earle Thornton, City Engineer, 203 City Hall; certified check, \$500.

Paving.—City Council, St. Petersburg, Fla., will receive bids until July 14 for grading and paving 9th St. and Fourth Ave.; vitrified brick, laid flat; granite or cement concrete curbing; width of paving, 20 feet; profile, plans and specifications on file in office of City Engineer M. W. Spencer; contractors to submit separate bids on each set and on grading, paving and curbing, both granite and cement concrete; each bid to be accompanied by certified check for \$200; W. F. Divine, City Clerk.

Paving.—Baltimore (Md.) Board of Awards, care of J. Sewell Thomas, City Register, City Hall, will receive bids until July 13 to grade, curb and pave with sheet asphalt, asphalt block, vitrified block or bitulithic Fayette St. from Lakewood Ave. to eastern city limits; specifications and proposal sheets furnished upon application at office of B. T. Fendall, City Engineer.

Paving.—John Skain, Mayor, Lexington, Ky., will open bids July 9 for improvement of Main St. from Limestone St. to Walton Ave. with brick, bitulithic, creosoted wooden block or asphalt paving; 24,530 square yards paving, 3975 cubic yards concrete and 775 feet limestone or concrete curbing; information on application; certified check for \$500, payable to John W. Bain, treasurer.

Piping.—McClary-Jemison Machinery Co., Birmingham, Ala., wants to correspond with manufacturers of natural-gas pipe for trunk line from gas fields to place of consumption.

Playground Equipment.—C. E. Barber, president board of trustees San Benito Independent School District, San Benito, Tex.,

will receive bids on playground equipment for school.

Planing-mill Machinery.—Welch Lumber Co., Welch, W. Va., wants prices on planing-mill machinery.

Printing Machinery.—R. Roberts & Son, Delta, Pa., wants to correspond with manufacturers of machinery for printing plant.

Pump.—See "Water-works Equipment."

Pump.—B. E. Boggs, Spartanburg, S. C., wants second-hand Emerson pump; 400 to 500 gallons per minute; complete with suction and discharge pipe; give price, etc.

Quarrying Machinery.—J. T. Brand, J. T. Brand Granite Co., Lithonia, Ga., wants prices on second-hand gasoline engine and air compressor; all mounted on trucks; also two or three plug drills for hard granite.

Railroad Construction Materials.—Continental Construction Co., Independence, Kan., wants to correspond with manufacturers of and dealers in various materials for railroad construction.

Rails, etc.—Jos. E. Brown, 901 Bank of Commerce Bldg., Norfolk, Va., wants 1000 tons 50 to 60-pound relaying steel rails with angle bars; Southern delivery.

Rails.—F. C. Thomas, Manning, S. C., wants one to two miles 30-pound relaying steel rail with clamps, delivered Deep Creek, N. & W. Railroad.

Railway Construction Materials.—Continental Construction Co., J. H. Brewster, president, Independence, Kan., wants bids on 5500 tons 70-pound rail and 600 tons 60-pound rail, A. S. C. E. pattern, Bessemer steel and continuous rail joint and standard angle bar; 1700 kegs 5½x9-16 spikes; 400 kegs Harvey grip track bolts; 150,000 untreated standard crossties, white post or burr oak, or 150,000 treated crossties from other than 1x4 oak wood—from loblolly, short-leaf, Western yellow and other sap pines, or spruce, hemlock and tamarack; also standard piling per specifications; material subject to inspection on arrival; delivery to be commenced on or about August 1 at Caney, Kans., and continued per order.

Rice Mill.—J. G. White & Co., 43 Exchange Pl., New York, want rice mill of 5000 pounds daily capacity; for export.

Road Construction.—Grayson County Commissioners' Court, Sherman, Tex., will open bids August 10 for construction of 65 miles of macadam road in Road District No. 1, in vicinity of Denison, Tex.; profiles, plans and specifications on file in office of J. C. Field, engineer in charge, Denison, Tex.; copies sent applicants on receipt of \$2; certified check \$5000; H. E. Wallace, County Auditor, Sherman, Tex.

Road Construction.—Bids will be received at office of Clerk of St. Johns county, St. Augustine, Fla., until August 1 for construction of public highway, in accordance with drawings and specifications prepared by C. M. Milburn, Engineer, St. Augustine, and on file in office of County Clerk; each bid to be accompanied by certified check for \$300, payable to B. Genovar, Chairman County Commissioners.

Road Graveling.—Turnpike Board, D. P. Prescott, secretary and superintendent, Memphis, Tenn., will open bids July 9 for graveling about 29 miles of road; certified check, \$250.

Roofing.—Joe Schad, P. O. Box 81, Wilmington, N. C., wants prices on three-ply ready roofing.

Road Machinery.—John G. Duncan Company, Box 265, Knoxville, Tenn., wants road roller for hauling macadam, with cars or wagons having capacity of four yards each; grade is 2 per cent. good road; wants price on cars or wagons for handling four tons macadam to each wagon; also roller and engine combined for hauling two or more wagons with above macadam on 2 per cent. grade.

Road Roller.—Bryan & Co., Jacksonville, Fla., want 10-ton steam road roller; second-hand.

Rock Crusher.—Bryan & Co., Jacksonville, Fla., want second-hand rock crusher.

Sawmill Manufacturers.—American Portable Band Sawmill Co., B. F. Watkins, president, Greensboro, N. C., wants to correspond with sawmill manufacturers relative to contracting for patented portable sawmills.

Seating.—C. E. Barber, president board of trustees San Benito Independent School District, San Benito, Tex., will receive bids on seating.

Sewer Construction.—See "Water-works, etc."

Sewer Construction.—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until July 20 for constructing storm-

water drains, contract No. 10, as shown on plans on file in office of Calvin W. Hendrick, chief engineer Sewerage Commission; specifications and plans may be obtained upon application at office of Sewerage Commission, 904 American Bldg., after July 8; charge of \$2.50 will be made for each specification and blueprint; certified check for \$700 to accompany each bid. Approximate quantities: 750 linear feet 42-inch circular drain; 120 linear feet 18-inch circular drain; 55 linear feet 12, 13 and 15-inch inlet connections; 10 cubic yards brick masonry; 15 cubic yards concrete; 1000 pounds reinforcing steel; 500 linear feet 6-inch underdrain; 30 feet manholes; 6 inlets; Peter Leary, Jr., chairman of Sewerage Commission.

Steam Roller.—John M. Carrera, City Clerk, St. Augustine, Fla., will receive bids until July 20 for five-ton steam roller; bidders to accompany bids with specifications; delivery to be made during August at City Bldg.

Transmission Machinery.—See "Oil-mill Machinery."

Vault.—Treasury Department, office of Supervising Architect James Knox Taylor, Washington, D. C. Sealed proposals will be received until July 28 for new vault in fourth floor of United States Treasury, in strict accordance with drawings and specification, copies of which may be obtained at this office at discretion of architect.

Venetian Blinds.—J. H. Johnson, Sumter, S. C., wants prices on inside sliding blinds.

Ventilating Fans.—J. C. Lattimore, 1124

South 5th St., Waco, Tex., wants catalogues and prices on fans for ventilating.

Wagons.—See "Road Machinery."

Water Coolers.—Dallas Distilled Water Co., H. L. Dreyer, president, Dallas, Tex., wants prices on water coolers for offices and dwellings.

Water System.—J. H. Johnson, Sumter, S. C., wants prices on water system.

Water-works, etc.—Sylvania, Ga., will receive bids until July 20 for construction of water-works, electric-light plant and sewer system. For full information address A. B. Lovett, Mayor, of J. B. McCrary Company, engineers, Atlanta, Ga.

Water-works Equipment.—Town of Tishomingo, Okla., wants catalogues and prices on 20-horse-power gasoline engine, four and six-inch pump, and filter plant; for water system. Address C. B. Thomas.

Water-works.—Constructing Quartermaster, Fort Moultrie, S. C., will receive bids until July 23 for constructing three reinforced concrete reservoirs and water-distributing system for fire purposes; information on application; bidders to forward certified check for \$10, payable to Constructing Quartermaster, to secure plans, etc.

Woodworking Machinery.—J. S. Dovel, 41-47 West Washington St., Harrisonburg, Va., in market for second-hand mortiser and tenoning machine; mortiser must have boring attachment (Goldway preferred) and tenoner must have double head and double copes.

tel, Fort Worth, Tex., Sanguinet & Staats, architects, and the Shearn Church at Houston, Tex., Sanguinet & Staats, architects, the structure to be trimmed in green glaze and gray terra-cotta. The Atlantic Terra-Cotta Co. operates factories at Tottenville, N. Y.; Perth Amboy, N. J., and Rocky Hill, N. J.

Lapidas for Cement and Concrete.

Among waterproofing compounds for cement and concrete, which have been favorably introduced and extensively used, is a preparation known as "Lapidas." This product has been subjected to severe tests by prominent engineers who report that concrete mixed with it shows only a slight loss of strength in the early periods, while it shows a decided increase later. In percolation tests it has been shown that the addition of the compound has materially retarded percolation under varying conditions. Lapidas is manufactured by F. William Stocker & Co., Inc., 94 West 33d street, New York, and literature relating to it is now being distributed.

Will Enlarge Plow Factory.

For the better handling of its rapidly growing trade, the William J. Oliver Manufacturing Co., Knoxville, Tenn., is making active preparations for extensive enlargements to its plant. In this connection it is of interest to note that L. LeVan, for many years general superintendent of the Oliver Chilled Plow Works at South Bend, Ind., has become vice-president of the Oliver Company and will have absolute charge of its manufacturing department. The contemplated improvements to the plant will be made under Mr. LeVan's supervision, the extensions to cost from \$300,000 to \$250,000. The company states that it is preparing to handle an immense trade in the plow line, and as it has been unable heretofore to fill its orders with the facility with which it desires, it has found the extension of its plant a necessity. Among the improvements contemplated is the installation of a malleable iron foundry.

New Dodge Warehouse Building.

It is announced that the Dodge Manufacturing Co., Mishawaka, Ind., will soon be able to store pulleys, hangers, clutches, bearings and other stock goods in its new warehouse at Mishawaka. Work is progressing rapidly, and already the first floor has been passed and material is being laid for the second. As concrete is mixed by machinery and conveyed as needed by means of bucket elevators and pipes, no time is lost in keeping things moving every working minute in the day. The completed structure will be one of the most modern in the country. Reinforced concrete is being used entirely with "Fenestra" steel windows, thus insuring proof against fire. The plans call for four stories and basement, 256x112 feet. In addition to its use for storage, excellent facilities will be provided for crating goods quickly. Along one side and one end a loading platform has been built, where cars can be filled without delay and hurried to the Lake Shore & Michigan Southern Railroad by ample trackage for immediate delivery to customers.

With Increased Facilities.

The Baltimore Refractory & Fire Brick Co., Hull and Nicholson streets, Baltimore, one of the oldest manufacturers of fire clay products and designers and erectors of coal gas benches and industrial furnaces in the country, makes a very encouraging report of its trade. This company states that it has large contracts in six States, in addition to New England, where Waldo Bros., Boston, Mass., act as its agents.

Its engineering department is preparing plans for several municipal gas plants and industrial furnaces, while the demand for its new Pergola tile for garden walks and roof gardens, of which only a few can be burned in each kiln, exceeds the supply, and its terra-cotta chimney top department is not increasing stock on hand.

In order to replace the plant destroyed by fire with a thoroughly modern one, a large investment was necessary, and for the purpose of properly developing its trade, commensurate with its increased facilities, the company offers to sell a small amount of its stock.

Recent Sales of Vilter Machinery.

Recent sales of ice-making and refrigerating machinery, Corliss engines and other equipment by the Vilter Manufacturing Co., Milwaukee, Wis., include the following: Seven-ton refrigerating machine to American Beet Sugar Co., Oxnard, Cal.; 14x36-inch Corliss engine to Christie Engine Co., Waterloo, Iowa; 4-ton refrigerating plant to Timpson (Tex.) Bottling Co.; 134-ton refrigerating machine, with 24x34-inch heavy-

duty Corliss engine, to Miller & Lux, San Francisco; 16x36-inch glider-frame Corliss engine to Cream City Bedding Co., Milwaukee, Wis.; 20x36-inch heavy-duty Corliss engine to Mutual Wheel Co., Moline, Wis.; two vacuum pumps to Horlick's Malted Milk Co., Racine, Wis.; direct expansion piping system to Little Rock (Ark.) Brewing & Ice Co.; 30 horse-power engine, boiler, pump, etc., to city of Baraboo, Wis.; 20x30 air compressor to William Franzen & Son, Milwaukee, Wis.; 8-ton refrigerating machine to F. M. Stamper Company, Moberly, Mo.; 2-ton refrigerating machine to Kent Building, Brooklyn, N. Y.; 10-ton refrigerating plant to Central Iowa Poultry & Egg Co., Atlantic, Iowa, and 10-ton refrigerating plant to Fairmont (Minn.) Packing Co.

The J-M Roofing Salesman.

To those who are engaged or interested in building materials the J-M Roofing Salesman should be of value. This is a monthly publication issued by the H. W. Johns-Manville Company, Cleveland, New York and other cities, and contains some timely information.

The Mulconroy Company's Catalogue.

Illustrative and descriptive of the products of the Mulconroy Company, 722 Arch St., Philadelphia, is catalogue No. 22, recently issued. The company states that more than half the space in this publication is devoted to a description of goods different from those offered by other rubber companies, which feature should add to its value as a catalogue of reference for users of rubber goods. Among the products of the Mulconroy Company are metal-tube steam hose; dynamite "rock-drill" hose; Mulconroy flexible metallic, pneumatic, water, air and suction hose; Mulconroy high-pressure couplings; "7-league" sewed leather-soled rubber boots and shoes; belting, and mechanical rubber goods for all purposes.

Liquid Asphalt for Roads.

A pamphlet illustrative and descriptive of Indian liquid asphalt in connection with road construction and maintenance has been issued by the Indian Refining Co., general offices, First National Bank Building, Cincinnati. This publication is confined to an explanation of the company's methods, materials and facilities for manufacturing liquid asphalt, and to an enumeration of its merits and the results which have been accomplished by its use. Among the products of the Indian Refining Co. are heavy liquid asphalt blunder for road construction, liquid asphalt road preserver and dust eliminator, etc. Specifications for using them will be supplied upon request.

Elevators—Care and Operation.

The importance of having elevators, their surroundings and general equipment in the best condition at all times, for the safety of passengers and others using them, is universally recognized. Too much care cannot be taken to keep equipment of this character in good order, and to do so requires constant vigilance on the part of those having them in charge. For the purpose of calling attention to certain features in connection with the care and operation of elevators, which should not be overlooked or neglected in order to prevent accidents, the Aetna Life Insurance Co. of Hartford, Conn., has issued a booklet entitled "Elevators—Care and Operation." This publication is illustrated and contains information and general suggestions for the consideration of all persons interested in elevators.

Work Done—Work Doing.

An attractive booklet entitled "Work Done—Work Doing," which presents a list of its construction contracts completed or in progress, with classifications, locations and totals, has been issued by the Stone & Webster Engineering Corporation, Stone & Webster Bldg., 147 Milk St., Boston, Mass., and other cities. These undertakings are located in various parts of this and other countries, and, summarized, represent steam-power stations aggregating 121,520 kilowatts; water-power developments, 126,500 kilowatts; railway construction, 296 miles; building construction, 22 contracts; substations, 50,599 kilowatts, and miscellaneous work. The Stone & Webster Engineering Corporation acts as constructing engineer for water-power developments, transmission lines, steam-power plants, electric and steam railroad work, steel or concrete industrial plants and buildings, etc.

Security Cement and Lime Literature

Strength, durability and permanence are as essential in small work as in large reservoirs, sewers, tunnels, docks, large structures, buildings, etc., on which depend the reputation of engineers, architects and con-

INDUSTRIAL NEWS OF INTEREST

Completes Well-Drilling Contract.

Another important well-drilling contract has recently been completed by the Hughes Specialty Well Drilling Co., 96 Ashley Ave., Charleston, S. C. This well was drilled for the Texas Company, which is erecting an extensive plant on the Cooper River, near Charleston, and was six inches, 400 feet deep.

Factory Building for Lease.

An opportunity to lease a factory building, with necessary hydro-electric power for operating a manufacturing plant, is presented in an announcement of the A. & T. Power Co., Sparta, Ga. The structure is located within thirty feet of the company's plant, and is accessible to 100 acres of land available for building purposes.

Receive Contract for Depots.

Prominent among Southern contractors are Porter & Boyd, 908 Realty Bldg., Charlotte, N. C. This company erects buildings, heavy mill and railway construction, grading, street and sewer work, plain and reinforced concrete work, etc. It has recently received a contract from the Southern Railway for the erection of combination depots at Windsor and Ridgeville, both in South Carolina.

Good Demand for Its Products.

Among industrial companies reporting a steady and active demand for its products is the Nebraska & Iowa Steel Tank Co., 1124-1128 North 14th St., Omaha, Neb. This company is handling a satisfactory volume of trade in the various lines of its manufacture, its products including galvanized steel tanks for water and oil storage, grain bins, well casings, etc. Complete catalogue may be had by addressing the company.

Gave Satisfactory Service.

Supplying a constantly increasing demand, the Richmond Electric Co., Richmond, Va., frequently receives testimonials from users of its products who have gotten satisfactory service. Among these is one from a large Southern lumber company advising that the direct-current generator which it bought a number of years before has given entire satisfaction, and that it is pleased at its operation.

Civil Engineer Wants Location.

Commercial, business and industrial organizations, progressive leagues, clubs, officials and individuals of Southern and Southwestern towns and communities are invited to correspond with a civil engineer who desires to locate where the need and opportunity exist for the establishment of an office for general engineering practice. He will give up salaried engagements to locate permanently for the practice of his profession and may be addressed No. 648, care Manufacturers' Record.

Distributing Station at Charlotte.

For the purpose of making Charlotte its main distributing station for Western and Central North Carolina and South Carolina, the William C. Robinson & Son Company,

1501-07 Thames St., Baltimore, Md., is constructing a large corrugated-iron warehouse in that city. It will also establish an office there, which will be in charge of H. H. Straub, and carry in stock a complete line of high-grade lubricating oils and greases. Among the products of this company are oils and greases for all types of machinery, including cylinder, engine, spindle, dynamo oils, etc.

Receives Foreign Order.

The McLanahan-Stone Machine Co. of Holidaysburg, Pa., has received an order from the Christmas Island Phosphate Co. of London, England, for four phosphate driers to work in pairs with stack between them, two elevators and two engines for its mines on Christmas Island, in the Indian Ocean. The McLanahan-Stone Machine Co. has in the past furnished considerable machinery for the above company. For the development of its phosphate lands on Christmas Island the Christmas Island Phosphate Co. has been supplied with much equipment by the McLanahan-Stone Machine Co.

Establishes Plant at Norfolk.

The Standard Plastic Relief Co. of Cincinnati, O., announces its location at Norfolk, Va., with offices at 415 Dickson Bldg., for the purpose of manufacturing all kinds of plaster ornaments for both interior and exterior of buildings. It makes a specialty of furnishing ornamental cornices, which are made light, backed up with burlap, cast neat and strong, and easily put in place by the average mechanic. Among its products are cornices, capitals, brackets, centerpieces, moldings, panels, gables, pediments, rosettes, friezes, festoons, wreathes, cartouches, emblems, etc. Walnwright, Jackson & Co., Norfolk, Va., are its sales agents.

Augments Engineering Force.

Walter Ives, for the past nine years connected with the *Engineering and Mining Journal*, and Edward B. Sturges, E. M., a mining engineer of many years' experience, have associated themselves with the J. R. Alsing Engineering Company, manufacturer of crushing, grinding and pulverizing machinery. This company has largely increased its engineering force and obtained better manufacturing facilities. It has also established larger and more commodious offices at 90 West street, New York, and is better equipped to fill all orders. Mr. Ives is at present on a European trip in the interest of his new firm.

Has Large Southern Trade.

Among manufacturers of architectural terra-cotta which have developed an extensive Southern trade is the Atlantic Terra-Cotta Co., 1170 Broadway, New York. This company has recently received a number of important Southern orders for its products, which provide, among others, for supplying material for the Forsythe St. Theater, Atlanta, Ga., A. Ten Eyck Brown, architect; Harris county courthouse, Houston, Tex.; Lang & Winchell, architects; Delaware Ho-

tractors. Of the various brands of cement which have been extensively employed on both large and small construction work Security Portland cement has been favorably introduced and is widely known. This product is manufactured by the Security Cement & Lime Co., Equitable Bldg., Baltimore, Md., and is described in a pamphlet which the company is distributing and which also presents views of prominent construction work in which it has been employed. The company has also issued a pamphlet on lime, describing in detail the manufacture of its Berkley lime products, and one entitled "Farm Talk," which presents some of the advantages of using Security lime for agricultural purposes.

The Baltimore & Ohio Railroad has just completed a large steel bridge over Antietam Creek at Keedysville, Md. It is 110 feet long and 80 feet high, and replaces a wooden bridge.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,
Baltimore, Md., July 6.

In the Baltimore stock market dullness prevailed during the past week, although there was a slight revival on Tuesday, after the double holiday of Saturday and Monday. In the trading sales were made thus: United Railways common, 13 1/4 to 13 3/4; do. trust certificates, 14 to 13 3/4; do. incomes, 58 to 56 1/2, reacting to 57 1/2; do. funding 5s, 80 to 80 1/2; do. do. scrip, 80 to 80 1/2; do. 4s, 84 to 83 1/2; Consolidated Gas, Electric Light & Power common, 60; do. preferred, 88; Seaboard Air Line common, 19 1/4; Seaboard Company common, 22; do. first preferred, 75 1/2; Seaboard 4s, 84 1/2; do. do. stamped, 83 to 82 1/2; do. three-year 5s, 99 1/2; do. 10-year 5s, 99 to 99 1/2; do. adjustment 5s, 73 1/2; Consolidated Cotton Duck common, 5 3/4; Mt. Vernon-Woodberry Cotton Duck 5s, 72 to 70 1/4; G.B.-S. 1sts, 41 1/2 to 42.

Union Bank stock sold at 122 and ex-dividend at 117 1/2; Bank of Commerce, ex-dividend, 29 3/4; Maryland Casualty, 90; American Bonding, 79; Fidelity & Deposit, 147; Mercantile Trust, 137; Baltimore Trust, 166.

Other securities were traded in thus: Fairmont & Clarksburg Traction 5s, 94 3/4 to 95; Northern Central Railway stock, 122 to 125; City & Suburban (Baltimore) 5s, 106 3/4 to 106; Knoxville Traction 5s, 102; Norfolk & Portsmouth Traction 5s, 82 1/2; West Virginia Central 6s, 100 3/4; Georgia & Alabama Consolidated 5s, 102 1/4 and 102 1/2; Maryland Electric 5s, 96 to 96 1/2; Norfolk Railway & Light 5s, 99 1/2; City & Suburban (Washington) 5s, 101; Coal & Iron Railway 5s, 100; Jamison Coal & Coke, George's Creek scrip, 90 1/2; Merchants & Miners Transportation Co. voting trust, 71; Atlantic Coast Line of Connecticut, 5-20s, 88; Potomac Valley 5s, 107 1/2; Consolidation Coal, 109; German Fire Insurance, 16 1/2; Lexington Railway 5s, 90; Houston Oil common, 5 3/4; Wilmington & Weldon 4s, 98; Charleston Consolidated Electric 5s, 93; Baltimore City 4s, 1927, 100 1/4; Georgia, Carolina & Northern 5s, 104.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended
July 6, 1910.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	105 1/2	106
Fairmont & Clarksburg Com.....	100	..	35 1/2
Georgia Sou. & Fla. 1st Pfd.....	100	92	..
Georgia Sou. & Fla. 2d Pfd.....	100	72	74
Macon Railway & Light.....	100	5	..
Maryland & Pennsylvania.....	100	16	..
Seaboard Company Common.....	100	29	..
Seaboard Company 2d Pfd.....	100	..	42 1/2
United Rys. & Elec. Co.....	50	13 1/2	14 1/2
Western Maryland.....	100	42 1/2	45

Bank Stocks.

Citizens' National Bank.....	10	37	..
German Bank.....	100	100	..

Maryland National Bank.....	20	22 1/2	..
National Bank of Baltimore.....	100	118 1/2	..
National Bank of Commerce.....	15	29 1/2	..
National Marine Bank.....	30	42	..
National Union Bank of Md.....	100	..	122
Second National Bank.....	100	190	..

Trust, Fidelity and Casualty Stocks.

American Bonding Co.....	25	..	79
Maryland Casualty.....	25	89	91
Mercantile Trust & Deposit.....	50	..	140
U. S. Fidelity & Guaranty.....	100	133	..

Miscellaneous Stocks.

Ala. Con. Coal & Iron.....	100	..	31
Ala. Con. Coal & Iron Pfd.....	100	..	6
Con. Cotton Duck Common.....	50	..	21
Con. Cotton Duck Pfd.....	50	..	62
Con. Gas, Elec. Lt. & P. Com.....	100	87	88
Con. Gas, Elec. Lt. & P. Pfd.....	100	108 1/2	109 1/2
Consolidation Coal.....	100	..	15
Georges Creek Coal.....	100	..	74
Mer. & Miners' Trans. Co.....	100	70	..

Railroad Bonds.

Atlantic Coast Line 1st 4s, 1862.....	92 1/2	94	..
Atlan. Coast Line Conv. Deben. 4s.....	93	97	..
At. Coast L. (Conn.) 4s, Cfs., 5-20s.....	88	..	91
Carolina Central 4s, 1949.....	89	..	91
Coal & Coke Ry. 5s.....	99 1/2	100	..
Florida Southern 4s, 1940.....	91	..	91
Georgia & Alabama 5s, 1945.....	102 1/2	102 1/2	..
Ga. Caro. & Northern 1st 5s, 1929.....	104	104 1/2	..
Georgia Pacific 1st 6s, 1922.....	112 1/2	..	..
Ga. South. & Fla. 1st 5s, 1945.....	106 1/2	106 1/2	..
Macon, Dublin & Savannah 5s.....	95 1/2	..	..
Piedmont & Cum. 1st 5s, 1911.....	99 1/2	100	..
Potomac Valley 1st 5s, 1941.....	107	..	..
Richmond & Dan. Gold 6s, 1915.....	103 1/2	..	..
Seaboard 4s, Stamped.....	98 1/2	..	..
Seaboard Air Line 5s, 10-year, 1911.....	99 1/2	99 1/2	..
Seaboard Air Line 5s, 3-year.....	99 1/2	..	..
South Bound 5s, 1941.....	102	..	..
Virginia Midland 2d 6s, 1911.....	100 1/2	..	..
Virginia Midland 6th 5s.....	104 1/2	..	..
Washington & Vandemere 4 1/2s.....	94 1/2	..	..
W. Va. Cen. 1st 6s, 1911.....	100 1/2	100 1/2	..

Street Railway Bonds.

Balto. City Pass. 5s, 1911.....	100	100 1/2	..
Balto. Sp. Pt. & C. 4 1/2s.....	90	92 1/2	..
Balto. Trac. 1st 5s, 1929.....	108	..	..
Balto. T. (N. Balto. Div.) 5s, 1942.....	105	110	..
Charleston City Ry. 5s, 1929.....	103	..	..
Charleston Con. Elec. 5s, 1929.....	93	94	..
City & Suburban 5s (Balto.), 1922.....	106 1/2	107	..
City & Suburban 5s (Wash.), 1945.....	100	101 1/2	..
Fairmont & Clarksburg 5s.....	94 1/2	95 1/2	..
Knoxville Trac. 1st 5s, 1928.....	102	..	..
Lake Roland Elev. 5s, 1942.....	108 1/2	110	..
Lexington Ry. 1st 5s, 1949.....	90	..	..
Maryland Elec. Rys. 5s.....	96	96 1/2	..
Norfolk & Ports. Trac. 5s.....	82	82 1/2	..
United Rys. 1st 4s, 1949.....	83 1/2	84	..
United Rys. Income 4s, 1949.....	57 1/2	57 1/2	..
United Rys. Funding 5s.....	80 1/2	80 1/2	..

Miscellaneous Bonds.

Baltimore Electric 5s Spd.....	84	..	..
Con. Gas 5s, 1939.....	107 1/2	..	..
Con. Gas 4 1/2s.....	92	..	..
G.B.-S. Brew. 1st 4s.....	41 1/2	42	..
Mt. V. & Woodby Cot. Duck 5s.....	70	71	..
United Elec. Lt. & Pow. 4 1/2s.....	89	91	..

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending July 2.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	75	..
Aiken Mfg. Co. (S. C.).....	90	..
American Spinning Co. (S. C.).....	160	..
Anderson Cotton Mills (S. C.).....	53	55
Arcadia Mills (S. C.).....	100	..
Arkwright Cotton Mills (S. C.).....	100	103
Augusta Factory (Ga.).....	60	65
Avondale Mills (Ala.).....	115	..
Belton Mills (S. C.).....	127	..
Brandon Mills (S. C.).....	97	102
Cannon Mfg. Co. (N. C.).....	135	..
Cabarrus Cotton Mills (N. C.).....	130	135
Chadwick Mfg. Co. (N. C.) Pfd.....	100	..
Chiquola Mfg. Co. (S. C.).....	180	..
Clifton Mfg. Co. (S. C.).....	106	..
Clinton Cotton Mills (S. C.).....	120	120
Columbus Mfg. Co. (Ga.).....	93	98
Courtenay Mfg. Co. (S. C.).....	100	..
Dallas Mfg. Co. (Ala.).....	99	..
Darlington Mfg. Co. (S. C.).....	84	..
D. E. Converse Co. (S. C.).....	95	100
Drayton Mills (S. C.).....	95	106
Eagle & Phenix Mills (Ga.).....	117	..
Easley Cotton Mills (S. C.).....	175	185
Enoree Mfg. Co. (S. C.).....	57	60
Enoree Mfg. Co. (S. C.) Pfd.....	95	100
Enterprise Mfg. Co. (Ga.).....	80	85
Exposition Cotton Mills (Ga.).....	200	..
Galney Mfg. Co. (S. C.).....	80	85
Galveston Cotton Mills (Ga.).....	75	80
Gluck Mills (S. C.).....	100	102
Granby Cot. Mills (S. C.) 1st Pfd.....	35	45
Graniteville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	58	61
Grendel Mills (S. C.).....	114	117
Hartsville Cotton Mills (S. C.).....	175	..
Henrietta Mills (N. C.).....	160	175
Imman Mills (S. C.).....	104	108
King Mfg. Co. J. P. (Ga.).....	90	93
Lancaster Cotton Mills (S. C.).....	130	..
Lancaster Cot. Mills (S. C.) Pfd.....	97	100
Langley Mfg. Co. (S. C.).....	120	127
Laurens Mills (S. C.).....	127	..
Limestone Mills (S. C.).....	160	170
Lockhart Mills (S. C.).....	78	85
Lockhart Mills (S. C.) Pfd.....	99	100
Loray Cotton Mills (N. C.) Pfd.....	85	97 1/2
Marlboro Cotton Mills (S. C.).....	80	85
Mills Mfg. Co. (S. C.).....	105	110
Molloy Mfg. Co. (S. C.).....	105	..
Monaghan Mills (S. C.).....	110	..
Monarch Cotton Mills (S. C.).....	105	107
Newberry Cotton Mills (S. C.).....	125	130
Ninety-six Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	125	130
Olympia Cotton Mills (S. C.).....	90	..
Orr Cotton Mills (S. C.).....	209	..
Pacolet Mfg. Co. (S. C.).....	101	101
Pacolet Mfg. Co. (S. C.) Pfd.....	99	102
Pelzer Mfg. Co. (S. C.).....	169	..
Piedmont Mfg. Co. (S. C.).....	175	177
Poe Mfg. Co. F. W. (S. C.).....	170	180
Saxon Mills (S. C.).....	127	..
Sibley Mfg. Co. (Ga.).....	71	78
Spartan Mills (S. C.).....	131	140
Trion Mfg. Co. (Ga.).....	130	140
Tusculum Mills (S. C.) 1st Pfd.....	74	80
Union-Buffalo (S. C.) 2d Pfd.....	17	25
Victor Mfg. Co. (S. C.).....	154	..

Warren Mfg. Co. (S. C.).....	167	..
Warren Mfg. Co. (S. C.) Pfd.....	106	110
Washington Mills (Va.).....	28	..
Washington Mills (Va.) Pfd.....	106	110
Whitney Mfg. Co. (S. C.).....	122	..
Wiscasset Mills (N. C.).....	135	..
Woodruff Cotton Mills (S. C.).....	125	130
Woodside Cotton Mills (S. C.).....	105	110
Watts Mills (S. C.).....	97	100
Williamston Mills (S. C.).....	130	135

Bank Reports.

The First National Bank of Birmingham, Ala., reports June 30, 1910, loans and discounts, \$6,880,588; total cash, \$3,085,947; capital stock, \$1,000,000; surplus and profits, \$881,185; total deposits, \$8,561,351; total resources, \$11,458,137. The increase in deposits over June 30, 1909, was \$1,395,792; W. P. G. Harding, president; J. H. Woodward and J. H. Barr, vice-presidents; Thomas Hopkins, cashier, and F. S. Foster and Thomas Bowron, assistant cashiers. J. E. Ozburn is secretary savings department.

FINANCIAL CORPORATIONS.

Ala., Birmingham.—The Home Investment Co., capital \$500,000, is reported organized by J. F. Leary, president; William Leary, vice-president; R. B. Leary, secretary and treasurer; G. W. Yancey, general counsel.

Ala., Birmingham.—The Traders' Building and Loan Association, capital \$50,000, has filed articles of incorporation; J. F. Leary, president; W. M. Leary, vice-president; R. B. Leary, secretary and treasurer, and G. W. Yancey, general counsel.

Ala., Birmingham.—The Commonwealth Investment Co., authorized capital \$10,000, is reported incorporated by W. J. Caldwell, president; S. B. Reece, vice-president; Ben F. Barbour, secretary and treasurer.

Ala., Corey.—The First Bank of Corey, capital \$25,000, is reported organized with officers thus: President, Robert Jemison, Jr.; vice-president, Henry B. Gray; cashier, H. E. Dalbey; assistant cashier, Gus A. Pope, Jr.; directors, Robert Jemison, Jr., H. B. Gray, P. G. Shook, John L. Kaul, H. E. Dalbey.

Ala., Larkinsville.—Official: The Larkinsville Banking Co. incorporated; capital paid in \$15,000; surplus \$10,000. Business is to begin about August 1 with A. N. Blakemore president and M. Gentle vice-president; John D. Walker, Spartan, Ga., and others organizers.

Ala., Stevenson.—Official: The First National Bank of Stevenson chartered; capital \$25,000. Officers: W. J. Talley, president; J. Z. Schultz, vice-president; O. L. Bunn, second vice-president, and J. Z. Schultz, cashier. Business is to begin about September 1.

Ark., Little Rock.—The Arkansas Savings Bank, capital \$100,000, has filed articles of incorporation; directors, president, Jacob Niemeyer; vice-president, J. S. Pollock; secretary, T. S. Shannon; treasurer, T. H. Simms, Jr.; E. D. Carter, J. A. Bowman and Thomas Lonergan.

Ark., Nashville.—Official: The Dodson Investment Co. of Nashville incorporated; capital \$25,000; organizers, G. H. Bell, president; C. W. Dodson, vice-president; J. M. Power, secretary, and W. K. Haller.

D. C., Washington.—The National Bank Auditing Co. is reported organized with William B. Ridgely, president; Edward S. Mumford, vice-president.

Fla., Tampa.—The Peninsular Casualty Co., capital \$125,000, is reported to have opened for business with president, Duncan U. Fletcher; vice-president, M. D. Johnson; treasurer, O. S. Allbritton; secretary, P. D. Cassidy.

Fla., Tampa.—The Tampa Equity Co., capital \$50,000, has filed articles of incorporation. Officers, Arthur W. Cusaden, president; Tucker Savage, vice-president; Thomas J. O'Neill, secretary; C. L. Knight, treasurer.

Fla., Webster.—A new bank capitalized at \$15,000 is reported organized by J. R. Tatum, cashier of the City Savings Bank of Tampa, Fla.

Ga., Atlanta.—The Atlanta Stock Exchange will, according to press reports, open for business in about 10 days with officers thus: Roby Robinson, president; F. A. Brine of the Georgia Railway & Electric Co., vice-president; William Hurd Hillier, treasurer; A. Y. Whitman, secretary.

Ga., Augusta.—The Mortgage Company of Augusta, capital \$50,000, has filed articles of incorporation; petitioners, Geo. F. Claussen, Thos. H. Stafford, C. H. McClellan, Frank M. North, Geo. P. Bates, B. T. Lowe, J. T. Cleckley, C. E. Ferrebee, E. Claussen, F. H. Stellings, Chas. T. Tamsberg, H. C. Cassels, G. W. Evans, Arthur Card, R. C. Carroll, E.

L. Stellings, J. A. Andrews, H. S. Du Vall, D. Printup, J. D. Reynolds, W. C. Lyeth of Richmond county, and J. H. Brawner and R. S. Guess of Aiken county.

Ga., Augusta.—The Augusta Fire Insurance Co., capital \$150,000, has made application for a charter; petitioners, Thomas Barret, Jr., William K. Kitchen, Percy E. May, William E. Bush and John R. Burke.

Ga., Fort Gaines.—The Union Savings Bank, capital \$25,000, is reported organized with J. E. Peterson, president; W. T. Criddle, vice-president; W. H. Kampkin, assistant cashier; directors, J. E. Peterson, B. F. Pierce, M. E. Peterson, J. W. West, W. T. Criddle.

Ga., Ideal.—The Ideal Bank is reported organized by J. D. Walker of Sparta, Ga., and others.

Mo., Independence.—The Home Deposit Trust Co., capital \$100,000, is reported organized with R. W. McCurdy president, J. Allen Prewitt vice-president, William A. Symington treasurer, Frederick Bergschneider secretary, and George Corey assistant secretary.

Mo., Jasper.—The Missouri Miners' Casualty Co., capital \$200,000, has filed articles of incorporation. Directors, Charles B. Guinn, S. K. Orr, Carthage; C. E. Matthews, Thos. McCroskey, Webb City; W. R. Caulkins, Carthage; Ben C. Aylor, Webb City; Charles Schifferdecker, H. H. Gregg, David D. Hoag, H. C. Murphy, F. A. Wilbur and John F. Wise, Joplin, Mo.

N. C., Hayesville.—The Clay County Bank is reported to have begun business with Alden P. Howell of Waynesville, president, and Col. G. H. Hayler of Hayesville, cashier.

Okla., Hominy.—Official: The Pioneer Title & Mortgage Co. of Hominy chartered; capital \$15,000; incorporators, Carl Mullendore, L. D. Edgington and G. L. Edgington. Business began July 1.

Okla., Ponca City.—The Farmers' National Bank has been authorized to begin business; capital \$50,000. This is said to be a conversion of the Farmers' State Bank.

S. C., Georgetown.—The Winyah Building and Loan Association has been granted a commission; capital \$30,000 to \$50,000; petitioners, J. B. Steele, H. W. Fraser, H. B. Springs, S. M. Gladstone, H. Schenk, G. B. Sanders, J. H. Fraser, J. I. Hazard and E. V. Emerson.

S. C., Kingstree.—The Wee Nee Bank, capital \$10,000, has begun business with Hugh McCutchen, president; W. V. Strong, vice-president, and E. L. Montgomery, cashier.

S. C., Neeses.—The Bank of Neeses, capital \$10,000, is reported incorporated by H. L. J. Blume, B. A. Hughes and T. J. Bolen. L. B. Bolen will be president.

S. C., Newberry.—The Newberry Insurance & Realty Co. is reported to have been granted a commission; capital \$3000; petitioners, B. B. Reid and E. H. Aull.

S. C., Orangeburg.—The Farmers' Union Bank & Trust Co. is reported to have begun business with W. S. Barton, Jr., president; R. E. Wannamaker, vice-president; J. H. Clady, cashier.

S. C., Prosperity.—A new bank capitalized at \$30,000 is reported organized with J. D. Davenport president, J. A. Baker vice-president, E. O. Counts cashier; C. J. Purcell, J. C. Neal, J. D. Davenport, J. S. Caldwell, G. W. Kinard, J. A. Boker, C. S. Nickels and W. P. Counts elected directors.

Tenn., Athens.—The Ocoee Title Co. of McMinn County, capital \$10,000, incorporated by W. T. Roberts, U. G. Thompson, C. T. Riddle, J. D. Dickson and C. S. Matlock.

Tenn., Knoxville.—The East Tennessee Savings Bank, capital \$200,000, recently chartered, is reported to have elected officers thus: President, F. L. Fisher; vice-president, John L. Boyd; cashier, O. B. Henderson. The bank will be controlled and directed by the directors of the East Tennessee National Bank, but

The Merchants National Bank
 Established 1835
 South and Water Sts., BALTIMORE, MD.
 DOUGLAS H. THOMAS, President.
 WM. INGLE, Vice-Prest. and Cashier.
 J. C. WANDS, Asst. Cashier.
 JOHN B. H. DUNN, Asst. Cashier.
 Capital, \$1,500,000
 Surplus and Profit, \$900,000
 Deposits, \$12,000,000
 Accounts of Banks, Bankers, Corporations and
 Individuals solicited. We invite correspondence.

JOHN NUVEEN & CO.
 1st Nat. Bank Bldg., CHICAGO
 We purchase SCHOOL, COUNTY and MU-
 NICIPAL BONDS. Southern Municipal Bonds
 a Specialty.
 Write us if you have bonds for sale.

THE FIRST NATIONAL BANK
 OF KEY WEST, FLA.
 United States Depository and Disbursing
 Agent.
 Capital - - - - - \$100,000
 Surplus and Undivided Profits - 40,000
 A general banking business transacted.
 Special attention given to collections.

DELAWARE TRUST CO.
 WILMINGTON, DEL.

EDWARD T. CANBY, President.
 J. ERNEST SMITH, General Counsel and
 Vice-President.
 HARRY W. DAVIS, Secretary.

Fully Equipped Department for the
 Organization of Corporations under
 advice of Counsel, and for the Regis-
 tration of Corporations as required
 by the Delaware Law.
 Represents over 500 Domestic and
 Foreign Corporations.
 The Delaware Corporation Law is
 Broad, Liberal, Safe and Stable.
 Granting and annual taxes low.

MANUFACTURERS and JOBBERS
 Frequently find it necessary to have
BANKING FACILITIES in addition
 to those offered by local banks.

FIRST NATIONAL BANK OF RICHMOND, VA.
 With assets of nine million dollars, offers
 just the additional facilities required.
 Jno. B. Purcell, President.
 Geo. M. Miller, Jr., Vice-Pres. and Cashier.

Hugh MacRae & Co.
 BANKERS
 MISCELLANEOUS SOUTHERN SECURITIES
 COTTON MILL STOCKS
 WILMINGTON, N. C.
 NEW YORK CITY 149 Broadway

Southern Steam
Railroad Securities
 DEALT IN
F. J. LISMAN & CO.
 Specialists in Steam R. R. Securities
 Members New York Stock Exchange,
 30 Broad Street NEW YORK
 404 Connecticut Mutual Bldg., Hartford.
 Land Title & Trust Bldg., Philadelphia.

CROSS CREEK COAL COMPANY 6% Gold
 bonds, total issue \$250,000. All have been dis-
 posed of to investors and bankers in differ-
 ent parts of the country, including Saco,
 Maine; Boston, Mass.; Rochester, N. Y.;
 Westfield, Olean, Fredonia and Buffalo, N. Y.;
 Franklin, Coudersport, Pittsburgh, Smeth-
 port, Shamokin and Fort Allegany, Pa.;
 Columbus, Dayton and Springfield, Ohio;
 Northfork, Welch and Bluefield, W. Va.;
 Roanoke, Va.; Nashville, Knoxville, Jasper,
 Chattanooga and South Pittsburg, Tenn.;
 Atlanta, Ga.; Lowell, Mass.; East Orange,
 N. J., and Washington, D. C., until now
 there are but \$30,000 of them left. These
 bonds are first lien on 7000 acres of the best
 coal properties in Tennessee, and \$75,000 of
 this money is being spent on an up-to-date
 coal works with a capacity of about 1000
 tons a day. Particulars will be furnished
 from the office, 1006 Mutual Life Building,
 Buffalo, N. Y. P. S.—A bonus of preferred
 stock will be given with the bonds.

GEO. M. CLARK
Auditor and Public Accountant
 Room 315 James Building
 CHATTANOOGA, TENN.

INVESTMENT
SECURITIES

Southern Stocks and Bonds
 Municipal and Corporation
 Cotton Mill Stock a Specialty
 WM. S. GLENN Broker - SPARTANBURG, S. C.

CAPITAL \$1,000,000 SURPLUS, \$2,500,000
 RESOURCES MORE THAN \$11,000,000

The Baltimore Trust Co.
 BALTIMORE, MD.

Successor to the
 International Trust Company of Maryland
 and
 The Baltimore Trust and Guarantee Company

OFFICERS
 THOMAS H. BOWLES, President DOUGLAS H. GORDON, First V.-Pres.
 G. C. MORRISON, Second V.-Pres. SAMUEL C. ROWLAND, Third V.-Pres.
 C. D. FENHAGEN, Secretary-Treasurer
 Interest Allowed on Deposits Subject to Check, and Special Rates Made on Time Deposits.
 Your Business is Solicited.

THE AMERICAN AUDIT CO.

E. A. LEITCH, Resident Manager. Mutual Building, RICHMOND, VA.
 Our reports are accepted by the leading financiers of the world,
 and are frequently made the basis of credit.
 Home Office, 100 Broadway, New York Branches in all Principal Cities

Incorporated Under Special Act of Legislature

BALTIMORE AUDIT COMPANY

1027-1029 Calvert Bldg., BALTIMORE, MD.

All work executed by or under direct supervision of Certified Public Accountants.

The National Exchange Bank
 OF BALTIMORE, MD.

Hopkins Place, German and Liberty Sts.
 Capital, \$1,000,000
 July 15, 1908, Surplus and Profits, \$671,631.60

OFFICERS:
 WALDO NEWCOMER, President.
 SUMMERFIELD BALDWIN, Vice-Pres.
 R. VINTON LANSDALE, Cashier.
 C. G. MORGAN, Asst. Cashier.
 Accounts of Mercantile Firms, Corporations,
 Banks, Bankers and Individuals Invited.

RELIABLE INFORMATION IS PROTECTION

If you could always get reliable, complete,
 unbiased information about any investment
 proposition offered you—if you could get all
 the pertinent facts relating to such invest-
 ments—you would make mighty few mis-
 takes, and your income would increase every
 year.
 We can give you such information. That's
 our business. Write today.
INVESTORS' INFORMATION BUREAU,
 Dept. H. 711-712-713 Union Trust Bldg.,
 Detroit.

CORPORATIONS ORGANIZED

Incorporate Your Business Under Delaware
 Laws and Avoid Personal or Partnership
 Liability. Insurance and Business Com-
 panies Chartered and Organized at reasonable
 rates. Different kinds of business may be
 transacted under the same Charter. Can
 operate anywhere. Bonds may be issued and
 sold to exploit the business. Law fully ad-
 judicated by our courts. Charters perpetual.
 Foreign Corporations Represented. For in-
 formation write
LAWYERS' CORPORATION TRUST CO.,
 Wilmington, Delaware.
 Artemas Smith, Esq., General Counsel.

GO SOUTH!

Real Estate, Timber, Mines, Industrial
 Properties, Investment Securities, Busi-
 ness Opportunities and Mortgages in South-
 ern States and Mexico, correspond with
SOUTHERN STATES DEVELOPMENT CO.
 GEO. B. EDWARDS, President, New York, N. Y.
 Office, Tribune Building, 154 Nassau St.
 Connections in the Principal Cities of Europe.

Our Bond Department

Is prepared to furnish desir-
 able Corporation, Timber,
 Irrigation and Municipal
 Bonds which yield substan-
 tial rates of interest.
 Write for particulars.

Interstate Trust & Banking Co.
 NEW ORLEANS, LOUISIANA

Capital and Surplus over One Million Dollars

SOUTHERN TRUST COMPANY
 HAWKINSVILLE, GEORGIA

Paid in Capital Stock, \$100,000

Buy and sell real estate, stocks, bonds,
 mortgages and other securities. Make
 investments and act as executor, ad-
 ministrators, trustee, receiver for firms,
 individuals and corporations.
 Real estate loans and preparing ab-
 stract of titles a specialty.
 6% interest allowed on time deposits.
 Correspondence solicited.

T. B. RAGAN, Pres. E. J. HENNY, Vice-Pres.
 H. E. COATES, Sec. & Treas.

SURETY BONDS

Fidelity and Deposit Co.
 OF MARYLAND

Home Office, BALTIMORE, MD.

Assets Over \$5,000,000

Pioneer Surety Co. of the South.
 Becomes Surety on bonds of every de-
 scription.

AGENTS IN ALL PRINCIPAL CITIES
 HARRY NICODEMUS, EDWIN WARFIELD,
 Sec'y and Treas. President

Municipal—Railroad—Public Utility
BONDS

Purchased in entire issues direct from Municipalities and
 Corporations. Circulars describing sound bonds which
 we have investigated and recommend for investment
 mailed to investors upon request.

Correspondence invited.

N. W. Halsey & Co., Bankers

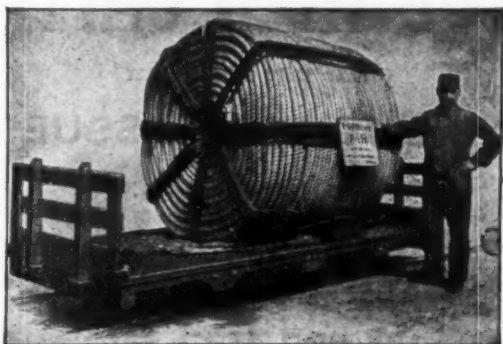
49 Wall Street, New York

PHILADELPHIA

CHICAGO

SAN FRANCISCO

"AMERICAN"



Coil 6000 ft. 1½" diameter American Transmission Rope without splice

If you plan, design, erect or operate power transmission appliances, you
 will be well repaid for investigating the manifold advantages and
 economies of

MANILA ROPE DRIVING

with
"AMERICAN" TRANSMISSION ROPE

The Blue Book of Rope Transmission published by us is a concise and
 authoritative treatise for engineers. It contains valuable information on
 the design, erection and maintenance of rope drives. Copies free upon
 request.

NOTICE.—If you have a problem in power transmission our engineer-
 ing department will be glad to go into the details with you. This service is
 extended absolutely without cost to prospective customers.

If you use Manila, Sisal, or Jute Rope, Lath Yarn or Cordage of any
 kind, it will pay you to communicate with

The American Manufacturing Co.

Largest Workers of Fibre in the World

63-65 WALL STREET

NEW YORK CITY

TRANSMISSION ROPE

business about July 15 with officers and directors thus: James F. Sadler, Jr., president; Thomas F. Turner, vice-president; W. N. Sadler, cashier; W. E. Gee and John G. Wayland, F. M. Pope is assistant cashier.

Tex., Beaumont.—The Davidson Securities Co. of Beaumont, capital \$200,000, is reported chartered; directors, W. S. Davidson, Frank Alvey, F. M. Law, Guy W. Junker, V. Wiess, John N. Gilbert, John C. Ward, Leon R. Levy and Joe E. Carroll.

Tex., Fort Worth.—A bonding and securities company capitalized at \$400,000 is reported being organized by R. T. Stuart and C. M. Harkrider, William Capps, W. B. Harrison, C. K. Oldham and Jack Carter.

Tex., Fort Worth.—The Powell Loan & Mortgage Co., capital \$25,000, incorporated by L. P. Powell, H. L. Vaughn, J. P. Bancroft and T. D. Ross.

Tex., Jayton.—Official: The First National Bank chartered; capital \$50,000. Business is to begin in about 30 days. This is a conversion of a private bank. Joe Jay and others, organizers.

Tex., Lufkin.—The Lufkin Investment & Security Co. has been granted a charter; capital \$10,000; incorporators, W. M. Glenn, Chas. R. Rowe and Kenneth Hoskins.

Tex., Lyford.—A State bank is reported being organized.

Tex., Lyons.—Official: The Lyons State Bank will soon begin business with J. F. Lyon, president, and Otto Schatz of Brenham, cashier; capital \$10,000.

Tex., Plainview.—The Third National Bank, capital \$100,000, has been authorized to begin business; J. E. Lancaster, president; L. G. Wilson and L. A. Knight, vice-presidents, and H. M. Burch, cashier.

Va., Branchville.—The Bank of Branchville is reported to have begun business with John W. Smith, president; J. Dudley Woodward, vice-president; B. W. Wyche, Jr., cashier; E. C. Davis, E. M. Harris, Arthur Pantan, W. T. Grizzard, Dr. J. W. Smith, R. P. Woodward, J. G. Stancell, R. E. Ralley, W. F. Howell, J. P. Fox and J. E. Harrison, directors.

Va., Roanoke.—The American Trust Co. incorporated; capital \$50,000; incorporators, G. H. P. Cole, president; E. W. Poindexter, vice-president, and C. E. Holcomb, secretary and cashier.

Tex., San Antonio.—The Security Title & Guaranty Co., capital \$100,000, has been granted a charter; incorporators, R. M. Howe, S. A. Coffman and J. A. Witz.

Tex., San Antonio.—Official: The Central Trust Co., capital \$500,000, has organized with directors thus: J. C. Terrell, president; Alexander Joske, Chas. Schreiner, Otto Koehler and R. R. Russell, vice-presidents, and B. G. Barnes, secretary and cashier; J. J. Atevens, J. T. Wilson, John W. Warren, Atlee B. Ayres, Jesse Oppenheimer, Sam C. Bell, Albert Steves, R. W. Hearne, M. Baumblatt, Dr. Adolph Herff, Alfred Duerler, Ed. Rand, Adolph Wagner, M. W. Terrell and John Fest.

Va., Mathews.—The Gloucester-Mathews Bank, Inc., capital \$25,000 to \$75,000, is reported organized with L. E. Mumford, president, Cape Charles, Va.; J. M. Lewis, secretary, Gloucester, Va.; J. P. Nottingham, cashier, Mathews, Va.

Va., Portsmouth.—The Seaboard Building and Loan Association, capital \$5000 to \$25,000, has been chartered, and business is expected to begin about July 10; directors, M. M. Crockett of Portsmouth, president; A. S. Horowitz, Norfolk, vice-president; John P. Goodman, secretary, and N. Goldstein, treasurer; I. E. Jacobson, M. Stark, Joseph Jacobson, William Karp, M. H. Jacobson and R. Scher, all of Portsmouth. Offices will be in the Goodman Building.

NEW SECURITIES.

Ala., Alexander City.—A vote will be taken July 18 on \$12,500 of bonds for water-main extension, sewers and liquidating debt for school building. T. C. Russell is Mayor.

Ala., Albertville.—Official: July 19 an election is to be held to vote on \$25,000 of 5 per cent. 30-year water-works bonds; denomination \$500; dated August 1, 1910.

Ala., Anniston.—The issue of \$100,000 of bonds for purchasing plant of the Anniston Water Supply Co. is reported defeated.

Ala., Birmingham.—Press reports state that an election will probably be held the latter part of August or the first of September to vote on \$1,000,000 of bonds for schools, crematories, etc.

Ala., Dothan.—Official: The First National Bank of Dothan has purchased \$85,000 of 8 per cent. 10-year sidewalk improvement bonds; denomination \$1000.

Ala., Evergreen.—Conecuh county is reported to have voted \$100,000 of good-roads bonds.

Ala., Mobile.—Reported that \$115,000 of paving bonds are to be issued.

Ala., Mobile.—A letter to the Manufacturers' Record says that \$117,000 is being asked for road improvements by the Board of Public Works, and bonds for that amount will doubtless be issued.

Ala., Selma.—An official letter confirms the report that all bids received June 20 for \$100,000 of the issue of \$250,000 of Dallas county 5 per cent. 30-year road bonds were rejected. P. H. Pitts is probate judge.

Ark., Heber Springs.—Reported that Heber School District proposes to issue bonds for erection of school to cost from \$20,000 to \$25,000. Address the School Board.

Fla., Chipley.—Reported voted: Bonds for water-works and school improvements.

Ga., Rome.—Reported that an election is to be held to vote on \$275,000 of municipal improvement bonds.

Ga., Macon.—Reports state that during the latter part of the summer or early fall an election will be held in Bibb county to vote on \$75,000 of courthouse-repair, \$100,000 of road and \$200,000 of bridge 5 per cent. 30-year bonds.

Ga., Oliver.—Official: Bids will be opened January 10, 1911, for \$2000 of 5 per cent. school-building bonds; denomination \$100; dated January 1, 1911; maturity, one each January 1 after date. Address John Kennedy, Mayor.

Ga., Rome.—Official: It is expected that an election will soon be ordered to vote \$90,000 or more bonds for school improvements, and nearly \$200,000 for water, sewers and pavement. Ross P. Cox is secretary of the School Board.

La., Amite City.—Official: \$30,000 of 5 per cent. school-building bonds have been voted, and bids for same will be received immediately. Denomination \$500 and \$100; dated July 1, 1910. Address A. C. Lewis, Amite, La.

La., New Orleans.—Press reports state that a check amounting to \$1,771,500 has been received from the Interstate Trust & Banking Co. in payment for \$175,000 of 5 per cent. dock-board bonds.

La., Shreveport.—The Commercial National Bank of Shreveport is reported to have purchased at par \$64,000 of the \$83,000 of 4 per cent. 40-year refunding bonds.

Md., Annapolis.—Official: Bids will be opened at noon July 9 for \$24,000 of 4 per cent. 4-24-year street improvement bonds; denomination \$500. Address James F. Strange, Mayor.

Md., Elkton.—A special election is to be held July 11, it is reported, to vote on \$60,000 of water-works, electric light and sewer bonds.

Md., Havre de Grace.—Official: \$27,000 of 5 per cent. 18-year street improvement and damage suit bonds are to be issued; denomination, 100 of \$100 each and 34 of \$500 each. Address C. C. Pusey. Press dispatches state that bids for the bonds will be received until 2 P. M. July 21 by M. Vandiver, chairman, Street Improvement Commission.

Md., Westminster.—An official letter confirms the report that \$25,000 of bonds have been sold to pay off indebtedness and repair streets. S. P. Weaver is clerk.

Miss, Macon.—An official letter confirms the report that \$12,500 of 5 per cent. 20-year bonds of Noxubee county courthouse-repair bonds were purchased by the Brighton German Bank Co., Cincinnati, at \$12,700.50 and accrued interest. Denomination \$500.

Miss, Meridian.—Press reports state that an election will be held to vote on \$275,000 of street-improvement bonds. J. W. Parker is Mayor.

Mo., Birch Tree.—Reported that Birch Tree School District has voted to issue \$7500 of school-building bonds.

Mo., Butler.—\$35,000 of 4 per cent. 5-20-year high-school bonds are reported voted.

Mo., Columbia.—The Mercantile Trust Co. of St. Louis is reported to have recently purchased at par, less \$125 for blank bonds, attorney's fees and other expenses, \$25,000 of 4½ per cent. 10-20-year school-district bonds.

Mo., Kirksville.—Reported that \$8000 of 5 per cent. judgment funding bonds have been authorized.

Mo., Independence.—Reported that \$15,000 of electric-light bonds will be issued.

N. C., Sanford.—T. L. Chisholm, Mayor, confirms the report that \$25,000 of sewer bonds were sold to Hood & Co., Detroit, Mich.

Mo., Sedalia.—Official: \$65,000 of 4½ per cent. 10-20-year bonds of Sedalia School District are to be sold at private sale. Denomination probably \$1000, but would suit

purchaser. Address A. W. McKenzie, secretary.

Mo., Tipton.—Reported that all bids received June 27 for \$17,500 of 5 per cent. bonds were rejected, and bids for same are again asked until July 25. Address Joseph Sommerhauser, City Clerk.

N. C., Southern Pines.—Official: R. E. Wiley, Mayor, will receive bids until 8 P. M. August 6 for \$20,000 of 6 per cent. 20-year refunding bonds; denomination \$500.

Okla., Fairfax.—Reported that \$38,000 of

water-works and \$12,000 of sewer 6 per cent. bonds have been voted. The Southwestern Engineering Co. of Oklahoma City is said to have purchased the bonds.

Okla., Sayre.—Official: Bids will be received until 2 P. M. July 7 for \$70,000 of 5 per cent. Beckham county courthouse and jail bonds; denomination \$1000; dated July 1, 1910; maturity, July 1, 1921 and 1930, inclusive. Address I. H. Conuchoel, chairman of the board.

Okla., Oklahoma City.—Bids will be received by Bob Parman, City Clerk, until 5 P. M.

CONDENSED REPORT TO COMPTROLLER

The First National Bank

OF BIRMINGHAM, ALA.

ALABAMA'S FIRST MILLION-DOLLAR BANK

THURSDAY, JUNE 30, 1910.

RESOURCES.	LIABILITIES.
Loans and Discounts.....\$6,880,588.57	Capital Stock.....\$1,000,000.00
Overdrafts.....109.74	Surplus and Profits.....881,185.78
U. S. Bonds and Premiums. 1,119,000.00	Dividend No. 63.....25,000.00
Other Stocks and Bonds.... 204,600.00	Circulation.....990,600.00
State of Alabama Bonds.... 167,891.11	
CASH.	DEPOSITS.
In Vault.....\$1,160,632.85	Individual.....\$7,379,282.53
With Banks.... 1,866,814.81	Bank.....1,082,068.77
With U. S. Treasurer.... 58,500.00	United States.. 100,000.00
	\$8,561,351.30
	\$11,458,137.08

UNITED STATES DEPOSITARY

OFFICERS

W. P. G. HARDING, President.
J. H. WOODWARD, Vice-President. J. H. BARR, Vice-President.
THOMAS HOPKINS, Cashier.
F. S. FOSTER, Assistant Cashier. THOS. BOWRON, Assistant Cashier.
J. E. OZBURN, Secretary Savings Department.

Deposits June 30, 1910.....\$8,561,351.30
Deposits June 30, 1909.....7,165,558.57

Increase.....\$1,395,792.73

CAREFUL ATTENTION GIVEN TO COLLECTIONS

IF YOU NEED CAPITAL

please take notice that

WE BUY BOND ISSUES

secured by first mortgage on

**Timber
Water Powers
Coal and Iron Ore
Railroads
Manufacturing and
Industrial Properties**

IN AMOUNTS OF \$100,000 to \$5,000,000

Address us or our special representative

**Thomas Evans at Hotel Grunewald,
New Orleans, direct, and get quick action**

Peabody, Houghteling & Co.

(Established 1865)

181 La Salle Street

Chicago, Ill.

July 25 for \$150,000 of park site, \$50,000 of park improvement, \$150,000 of public fire station and equipment, \$10,000 of police alarm system and \$15,000 of street 25-year bonds; interest 4½ and 5 per cent.

S. C., Aiken.—Reported that an election is to be held in July to vote on \$78,000 of water-works and sewerage bonds.

S. C., Columbia.—W. H. Gibbs, Mayor, writes that it has been decided to withdraw the 4 per cent. refunding bonds from the market for a year. If necessary, they will be replaced with 4½ per cents, which will probably be offered in open market July 1, 1911. The law requires that the bonds must be sold at par.

S. C., Mullins.—Reported voted: \$10,000 of bonds in aid of the North & South Carolina Railroad.

S. C., Pageland.—Reported that \$8000 of school bonds have been sold.

S. C., Paxville.—Bids will be received until July 15 for \$12,000 of school-building bonds.

Tenn., Knoxville.—William H. Gass is reported to have purchased for the Knoxville Banking & Trust Co. at par, accrued interest and premium of \$1618 the \$275,000 of 5 per cent. Knoxville Southern Railway refunding bonds.

Tenn., Memphis.—Bids will be received by the Police Station Building Commission, Dave Halle, chairman, until 1 P. M. July 18 for \$350,000 of 4½ per cent. police station bonds; denomination \$1000.

Tex., Amarillo.—An official letter confirms the report that bids will be received until 3 P. M. July 21 for \$125,000 of 5 per cent. 20-40-year street, road, sewer and fire-station bonds. Address J. H. Patton, Mayor.

Tex., Amarillo.—Official: J. H. Patton, Mayor, will open bids July 21 for \$15,000 of street, road and bridge, \$40,000 of sewer and \$10,000 of fire station 5 per cent. 20-40-year bonds; dated April 1, 1910; denomination \$1000.

Tex., Austin.—The Attorney-General has approved the following securities: \$50,000 of 5 per cent. 20-40-year Freestone county road district No. 1 improvement bonds; \$6000 of 5 per cent. 5-40-year Devine independent school district schoolhouse bonds; \$12,500 of 5 per cent. 5-40-year Penelope independent school district schoolhouse bonds; \$1200 of 5 per cent. 10-20-year Walker county common school district No. 3 schoolhouse bonds; \$10,000 of 5 per cent. 10-40-year Nueces county common school district No. 25 schoolhouse bonds; \$6000 of 5 per cent. 10-40-year Nueces county common school district No. 23 schoolhouse bonds; \$8000 of 5 per cent. 5-40-year Brady independent school district bonds; \$6000 of 6 per cent. 4-10-year Henrietta St. improvement bonds; \$40,000 of 5 per cent. 20-40-year Mart independent school district bonds; \$4500 of 5 per cent. 10-20-year bonds of Sterling independent school district No. 1; \$40,000 of 5 per cent. 5-40-year Hillsboro street-improvement bonds; \$25,000 of 5 per cent. 10-40-year Knox county common school district No. 1 schoolhouse bonds; \$14,500 of 5 per cent. 20-40-year Roby independent school district bonds; \$13,500 of 5 per cent. 15-40-year Archer county common school district No. 4 school bonds; \$20,000 of 5 per cent. 10-40-year Yorktown independent school district bonds; \$4000 of 5 per cent. 10-40-year Mount Vernon school district bonds.

Tex., Beaumont.—Bids will be opened July 25 for \$75,000 of 5 per cent. 20-40-year Jefferson county road bonds. Address County Judge, Beaumont, Tex.

Tex., Cameron.—Reported that an election is to be held to vote bonds for sewerage system.

Tex., Centre.—Shelby county is reported to have purchased on June 17 at par and accrued interest \$4000 of the \$16,000 of 5 per cent. 20-40-year water-works bonds, and it is said bids for the remaining \$12,000 are being received by H. E. Norris, City Secretary.

Tex., Farwell.—Official: Bids will be received until 10 A. M. July 15 by J. M. Hamlin, president of the board, for \$19,000 of 5 per cent. 20-40-year independent school district bonds.

Tex., Forrester.—Reported voted: \$12,000 of school-building bonds.

Tex., Fort Worth.—The Texas Building Co. is reported to have purchased at par and accrued interest \$250,000 of 5 per cent. 20-40-year levee and dike bonds of Tarrant county improvement district No. 1.

Tex., Marshall.—Official: Bids will be received by H. S. Rice, City Secretary, until noon July 12 for \$50,000 of 5 per cent. 10-40-year high-school bonds.

Tex., McKinney.—Reported defeated: Road bonds.

Tex., Mexia.—July 16 an election is to be held to vote on \$200,000 of road bonds.

Tex., Mission.—Reported voted: \$15,000 of school bonds.

Tex., Navasota.—Reported that on July 19 an election is to be held to vote on \$20,000 of school district bonds.

Tex., Palacios.—Reported voted: \$100,000 of road bonds.

Tex., Penelope.—Official: \$12,500 of 5 per cent. 10-40-year school bonds are being offered for sale. Address the School Board.

Tex., Red Oak.—Bonds for road improvements are reported voted.

Tex., Roby.—An official letter says that the Board of School Trustees, T. H. Mayfield, president, is offering for sale school bonds. A press report says they are \$14,500 20-40-year 5 per cents.

Tex., Sabinal.—Reported voted: Bonds for public-school building.

Tex., Sherman.—Bids will be received by H. R. Wallace, Auditor of Greyson county, until 2 P. M. July 11 for \$250,000 of 4½ per cent. 8½-20-year bonds of road district No. 1.

Va., Chatham.—Reported that an election is to be held July 28 to vote on \$10,000 of high-school building bonds. Address County Clerk.

Va., Graham.—An election will probably be held, it is reported, to vote on \$10,000 of school and \$10,000 of water system improvement and extension bonds. An official letter says: "Have no bond issue at present."

Va., Radford.—Bids will be received by J. D. Byrd, clerk of the City Council, until July 28 for \$98,000 of 5 per cent. 30-year bonds for schools, streets and refunding. R. J. Noel, chairman of finance committee.

Va., Roanoke.—W. L. Craft, City Clerk and Auditor, is reported offering at private sale \$100,000 of school, \$40,000 of fire-station, \$75,000 of sewer-improvement and \$285,000 of street-improvement 4½ per cent. 30-year bonds.

Va., Warrenton.—Official: A. R. Bartenstein will receive bids until noon July 1 for \$15,000 of 5 per cent. 30-year bonds for municipal buildings and repairing reservoir; denomination \$500.

W. Va., Big Sandy.—J. R. Davis, secretary Board of Education, will receive bids until August 1 for \$30,000 of 5 per cent. 10-34-year school bonds.

W. Va., Beckley.—Reported voted: \$60,000 of street and sewer bonds.

W. Va., Welch.—July 19 an election is to be held in Brown's Creek District of McDowell county to vote on \$65,000 of school bonds.

At Marshall, Tex., bids will be received until noon July 12 for \$50,000 of 5 per cent. 10-40-year high-school bonds. Further particulars will be found in the advertising columns.

At Farwell, Tex., bids will be received until 10 A. M. July 15 for \$19,000 of 5 per cent. 20-40-year Farwell Independent School District bonds. Further particulars will be found in the advertising columns.

FINANCIAL NOTES.

Press reports state that the Enterprise Bank of Charleston, S. C., will open a branch at Ridgeville, S. C.

The Mechanics' Savings Bank of Richmond, Va., has opened its new banking-house. It is a colored men's institution and John Mitchell, Jr., is president.

The People's Bank of Fleming, at Fleming, Ky., is reported to have increased its capital stock from \$25,000 to \$40,000.

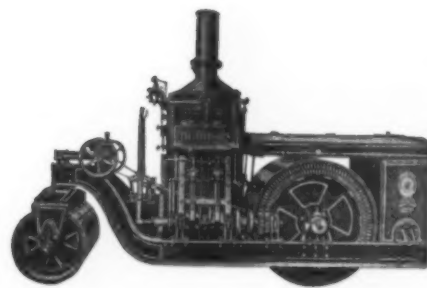
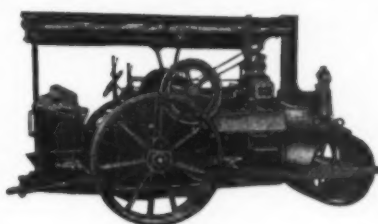
The Manufacturers and Merchants' Bank of Buena Vista, Va., is reported to have been converted into the First National Bank of Buena Vista, with a capital stock of \$25,000.

S. L. Harris, president of the Capital Security Co., Inc., confirms the report that the company has removed its offices from Washington, D. C., to Norfolk, Va., its address being 502-3 National Bank of Commerce Bldg. The company has an authorized capital of \$500,000.

Dispatches from Richmond, Va., say that the Bank of Richmond and the National Bank of Virginia have consolidated under the name of the National Bank of Virginia, and the City Bank of Richmond with the National State Bank, to be known as the National State and City Bank.

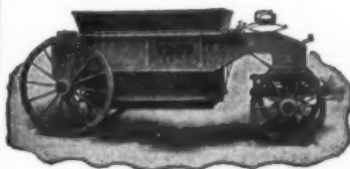
An officer of the City Bank & Trust Co., Mobile, Ala., sends some data published there concerning the banks of Mobile, showing that the clearings for the year ended June 30 were over \$73,000,000, as compared with something over \$67,000,000 for the preceding year. The deposits for seven banks and trust companies on June 30 amounted to \$8,982,235, an increase of over \$920,000 as compared with a year ago. The deposits of the City Bank & Trust Co. were \$3,240,080, heading the list, an increase of very nearly \$700,000.

THE IROQUOIS IRON WORKS STEAM ROLLERS



THE AMERICAN STANDARD FIFTEEN YEARS EXPERIENCE BUFFALO, N. Y.

If It Looks Trim It's a Troy



As every mechanic knows, a trim looking machine is usually an efficient one. Compare the present day, trim appearing automobile with the old time, cumbersome, cluttered up affairs, and you will see how much "looks" count in judging the merit of machines.

In the same manner the Troy may be contrasted with other dump wagons, and you will always observe that when you see a neat appearing, simple, trim wagon it is a Troy. Contrast that long tubular shaft on the Troy with the chains on other dump wagons for raising the bottom doors. Note the graceful lines and the general "air" of strength of the Troy. These "outward and visible signs" are a correct index of the whole character of a Troy wagon—simple, strong, serviceable. In these qualities it looks in vain for an equal.

Send for Catalog No. 2M and study the Troy dumping mechanism.

THE TROY WAGON WORKS CO.
106 East Race St. TROY, OHIO

Coleman's Waterproof Filler

for concrete blocks, brick walls, kalsomine, stone, plaster, fire hose, tents, awnings, etc. Stainless, and only transparent waterproofing patented. Absolutely water and mildew proof. Penetrates to depth of 1-16" to ¼", and becomes part of the thing waterproofed. Lasts as long as the structure itself. Try it and be convinced.

Virginia Waterproofing Corp. 324-326 ARCADE BLDG. Norfolk, Va.
MANUFACTURERS

BUCKEYE WIRE & IRON WORKS
Main and Eleventh Streets, COLUMBUS, OHIO
BANK AND OFFICE RAILINGS
WINDOW GUARDS, STALL GUARDS. Wire and Iron Work of Every Description.

ALPHABETICAL INDEX OF ADVERTISERS.

FOR "CLASSIFIED OPPORTUNITIES" See Pages 92-93-94

Ads. marked * appear every other week. Ads. marked † appear in first issue of the month. Ads. marked ‡ not in this issue

Abendroth & Root Mfg. Co.	5	Blakelee Mfg. Co.	130	De Laval Steam Turbine Co.	121	McClary-Jamison Mch. Co.	27	Waddell Co., The	47
Abrasive Material Co.	16	Blue Creek Coal & Land Co.	98	Delaware Trust Co.	122	McCrory Co., Inc., J. H.	27	Reed, Warren B.	47
Acme Knitting Machine & Needle Co.	141	Blue Creek Coal & Land Co.	98	Deming Co., The	122	McDaniel, Geo. A.	27	Reeves Mfg. Co.	47
Adams, Geo. J.	99	Bolles Iron & Wire Works, J. E.	45	Dempsey Mfg. Co.	91	McDonald Bros. Pitts Scale Co.	27	Remington Machine Co.	12
Adder Machine Co., The	94	Bolles Iron & Wire Works, J. E.	45	Denison Mfg. Co.	91	McGowan Co., John H.	139	Republic Iron & Steel Co.	41
Aetna Engineering Bureau	26	Bolles Iron & Wire Works, J. E.	45	Devinco, J. P.	58	McKenna, Dr. Chas. F.	26	Rever's Rubber Co.	23
Albany Steam Trap Co.	152	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Rice, H. S.	36
Albergher Condenser Co.	97	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Richardson & Co., Inc.	100
Albergher Steel Co.	8	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Richmond Electric Co.	120
Allen, A. M.	95	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Richmond Forge Corp.	120
Allen & Co., Ltd., Edgar	26	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Richmond, Fredrickburg & Potomac Railroad	120
Alpha Photo-Engraving Co.	56	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Ridgway Dym's & Engine Co.	121
Alpha Portland Cement Co.	30	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Rife Engine Co.	3
Aling Engineering Co., J. R.	13	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Aluminum Co. of America	13	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Amberson Hydraulic Const. Co.	107	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Air Compress. Wks.	107	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Asphaltum & Rubber Co.	8	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Audit Co., The	87	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Belting Co.	20	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Blower Co.	106	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Bridge Company of New York	44	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Cast Iron Pipe Co.	120	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Cement Co.	30	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Clay Mch. Co., The	55	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Compressor & Pump Co.	107	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Cotton Oil Co.	140	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Crocote Works, Inc.	135	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Amer. Electric Mach. & Elevator Co.	7	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Engine Co.	7	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Frog & Switch Co.	103	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Amer. Hoist & Derrick Co.	111	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Iron & Steel Mfg. Co.	127	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Laundry Machinery Mfg. Co.	109	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Locomotive Co.	105	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Machine Co.	25	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Mch. & Mfg. Co.	120	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Mfg. Co.	87	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Pipe & Construction Co.	130	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Process Co.	23	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Pulley Co., The	21	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Radiator Co., Bundy Dept.	1	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Railway Supply Co.	20	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Rolling Mill Co.	116	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Amer. Saw Mill Mch. Co.	126	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Sheet & Tin Plate Co.	49	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Spiral Pipe Works	128	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Steel & Wire Co.	129	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Supply Co. of Providence, R. I.	141	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American System of Reinforcing	96	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Valve & Meter Co.	130	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Water Softener Co.	14	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
American Well Works, The	136	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Anderson, W. F.	90	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Anderson Machine & Foundry Co.	32	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Arncliffe Mfg. Co.	50	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Arnold Co., The	26	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Arnold Sand & Gravel Co.	40	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Ashland Fire Brick Co.	68	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlanta, Birmingham & Atlantic Ry.	143	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlanta Steel Co.	127	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlanta Terra Cotta Co.	40	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlanta Utility Works	138	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlanta West Point R. R. Co.	149	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlantic Equipment Co.	100	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlantic Hydraulic Mch. Co.	131	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlas Machine Co.	8	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Atlas Portland Cement Co.	31	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Austin Mfg. Co.	122	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Austin Western Co., Ltd., The	121	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Avery Co.	121	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Babcock & Wilcox Co.	5	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Badger & Sons Co., E. B.	120	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baldwin Co.	21	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baker Ice Machine Co.	13	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baker, Jr., G. C.	95	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baldwin Equip. & Supply Co.	10	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baldwin Locomotive Works	106	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Ball Engine Co.	4	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Audit Co.	87	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Belting Co.	20	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Bridge Co.	44	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Cooperage Co.	2	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Electrical Supply Co.	149	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Office Supply Co.	51	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Refractory & Fire Brick Co.	26	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Steam Packet Co.	63	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baltimore Trust Co.	87	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Barber Asphalt Paving Co.	50	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Barnett Co., G. & H.	152	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Barrett Mfg. Co.	48	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Barrett Hayward Co., The	3	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Barrett & Snow Co., The	128	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baskerville, G. B.	26	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Baile & Meigs	27	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Beller & Wilson	90	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Belmont Iron Works, Inc.	44	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Bennett Rubber Stamp & Seal Co.	42	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Berry Bros., Ltd.	46	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Berger Mfg. Co.	46	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Bertsch & Co., R. L.	125	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Biles & Co., R. L.	125	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Bird & Son, F. A. & W.	47	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Bird & Co., J. A. & W.	47	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Birmingham Rail & Loco. Co.	100	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120
Blake Mfg. Co., The Geo. F.	133	Bolles Iron & Wire Works, J. E.	45	Dixie Electro Mfg. Co., The	140	McKenna, J. A.	101	Riviera Steel Casting Co.	120

Triumph Electric Co. 143
 Triumph Ice Machine Co. 143
 Troy Wagon Works Co. 143
 Truett Co., The 143
 Truett Concrete Steel Co. 143
 Tryon Hosiery Co. 143
 Tucker & Laxon 143
 Tudor Rubber Mfg. Co. 143
 Tulsa Commercial Club 143

U

Union Iron Works Co., The 143
 Union Mining Co. 143
 Union Steam Pump Co. 143
 Union Sulphur Co. 143
 United Roofing & Mfg. Co. 143
 United States Cast Iron Pipe & Foundry Co. 143
 United States Equipment Co. 143
 United States Gypsum Co. 143
 United States Rail Co. 143
 U. S. Wood Preserving Co. 143
 Universal Portland Cement Co. 143
 Universal Road Machinery Co. 143
 Upson-Smoother Construction Co. 143

V

Valk & Murdoch Iron Works 143
 Van Winkle Gin & Machine Co. 143
 Victor Manufacturing Co. 143
 Viller Manufacturing Co. 143
 Virginia Bridge & Iron Co. 143
 Virginia Metal Culvert Co. 143
 Virginia Waterproofing Corp. 143
 Vitified Wheel Co. 143
 Vogt Machine Co., Henry 143
 Volkmann & Company 143
 Volls Manufacturing Co. 143
 Voorhees Rubber Mfg. Co. 143
 Vulcan Iron Works 143

W

Wagner Electric Manufacturing Co. 143
 Wainwright Adamant Brick Co. 143
 Waldo, W. 143
 Walker & Kilbitt 143
 Wall Mfg. Supply Co., F. 143
 Walsh & Weldner Boiler Co. 143
 War Department 143
 Warren-Khret Co. 143
 Watson-Sullivan Co. 143
 Weather-Proofing Nail Co. 143
 Weber & Co., F. 143
 Weir Frog Co. 143
 Westbrook Elevator Co. 143
 Western Electric Co. 143
 Westinghouse Electric & Manufacturing Co. 143
 Westinghouse Machine Co. 143
 West Pascagoula Greaseoline Works 143
 West Pulverizing Machine Co. 143
 West Virginia Rail Co. 143
 Wetberill & Co., Inc., Rock 143
 Wheeler Cond. & Eng. Co. 143
 Wheelock Engineering Co. 143
 White & Co., J. G. 143
 Whitin Machine Works 143
 Whiting Foundry Equipment Co. 143
 Whittinsville Spinning Ring Co. 143
 Whitlock Coil Pipe Co. 143
 Whitman, O. R. 143
 Whitney, O. R. 143
 Wichita Falls, Texas, Chamber of Commerce 143
 Wight & Co., W. N. 143
 Wiley & Russell Mfg. Co. 143
 Williams Bros. 143
 Williams Co., The G. H. 143
 Williams Patent Crusher & Pulverizer Co., The 143
 Williams & Sons, I. B. 143
 Williamson Bros. Co. 143
 Wilmington Iron Works 143
 Wilson & Co., E. H. 143
 Winterer, Herman 143
 Wolf Co., The 143
 Wolf Co., Fred W. 143
 Wolf & Sons, W. 143
 Wood & Co., E. D. 143
 Wood Iron & Steel Co., Alb. 143
 Wood's Sons Co., T. B. 143
 Woosley, J. W. 143
 Worthington, Henry A. 143
 Wrightpress Co. 143
 Wyckoff & Son Co., A. 143
 Wyoming Shovel Works 143

Y

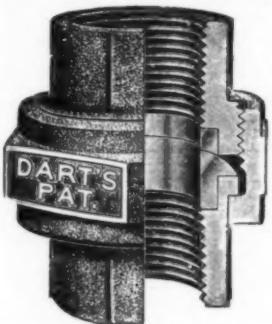
Yarley, Thomas 143
 York Bridge Co. 143
 York Manufacturing Co. 143
 York Safe & Lock Co. 143
 Young & Selden Co. 143
 Youngstown Sheet & Tube Co. 143

Z

Zell Motor Car Co. 143
 Zieglers Supply Co., Walter A. 143
 Zimmermann Steel Co. 143

Dart Patent
UNION

Inserted Bronze Rings



Forming the seats, has received the commendation of the Engineering world, and stands today the embodiment of perfection.

INSERTED PARTS have stood the test fourteen years.

Catalogue ready when you request.

E.M. Dart Mfg. Co.
 Providence, R. I.

Agents—The Fairbanks Co.
 Baltimore New Orleans
 Canadian Factory, Dart Union Co., Ltd., Toronto.

Boomer & Boschert
KNUCKLE-JOINT

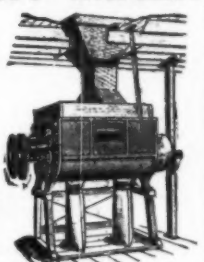


BOOMER & BOSCHERT PRESS CO.
 386 W. Water Street, SYRACUSE, N. Y.

The DRY MIXER

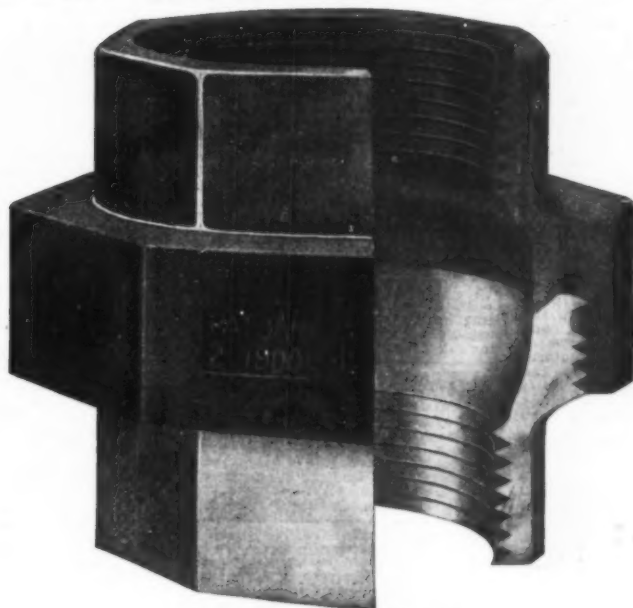
FOR
 Hard Plaster
 Cement
 Paint, etc.

W. D. DUNNING
 96 W. Water St.
 SYRACUSE, N. Y.



In the Realm of Tags
Dennison "P" Standard
 Is the recognized hall-mark of superiority. It denotes a quality of stock and grade of manufacture that for fifty years has satisfied the shippers of the world. Let us know your requirements.
Dennison Manufacturing Co.
 THE TAG MAKERS
 BOSTON NEW YORK PHILADELPHIA CHICAGO ST. LOUIS

"I Am Getting Faultless Service From the 'Kewanee' Union"



"The Union with no inserted parts"

- q This was the remark of the Chief Engineer of a large Ice Cream Factory in Northern New York.
- q Our representative called to demonstrate the merits of the "KEWANEE" UNION, but found the work already done.
- q In fact, the Chief Engineer was almost as great an enthusiast on the subject of the "KEWANEE" UNION as our representative.
- q We quote his report in full:
- "I was able to see Mr. — this morning, and he said he is getting **faultless service** from our union. He specified when the plant was erected, and told me today that he figured out one day that he had 516 in use, and has never had any trouble with a single one. This surely is a good instance of the steady work done by 'KEWANEE' UNIONS under all conditions, for some of the unions are on brine lines, and others on steam, and still others on water lines."
- q Some of the reasons which originally induced this Chief Engineer to install "KEWANEE" UNIONS are the following:
- (a) Brass to iron thread connection at the ring. Brass to iron will not rust together, and the joints can be disconnected and reconnected without injury. An iron to iron joint will ultimately rust together, thus unfitting it for further service.
- (b) Brass to iron ball joint seat. A joint of two different metals (that is, a hard and a soft metal) is better than a joint made of two soft or two hard metals, for a brass to iron ball joint makes a tight seal without a gasket.
- (c) The "KEWANEE" UNION consists of three solid parts only; there are no inserted pieces to become loose by unequal expansion or contraction.
- (d) When after years of service the "KEWANEE" UNION has earned the repose of the scrap pile, the brass end has a substantial cash value.
- (e) Every "KEWANEE" UNION is tested with 100 lbs. compressed air under water; the slightest leak shows on the water in the form of a bubble, and any defective union is scrapped. The value of this test is that every union sent out is practically perfect.
- q Write to us if you are interested in the union question, and we will send you a copy of our illustrated booklet "THE WHOLE KEWANEE FAMILY."

NATIONAL TUBE CO. General Sales Offices, Frick Bldg. PITTSBURGH, PA.

District Sales Offices

ATLANTA DENVER NEW YORK PITTSBURGH SAN FRANCISCO SALT LAKE CITY
 CHICAGO NEW ORLEANS PHILADELPHIA PORTLAND ST. LOUIS SEATTLE

Export Representatives: United States Steel Products Export Co., New York City.

Classified Opportunities

AGENCIES WANTED

WANTED—The selling agency for a good specialty, patented article or special line of goods by an experienced salesman and manager; will pay prompt cash. Address P. O. Box 2258, Boston, Mass.

BUILDING Specialty Manufacturers desiring to increase their sales in this vicinity should correspond with Southern Fireproofing Supply Co., Inc., 1224 H St. N. W., Washington, D. C. Now successfully handling "Herringbone Steel Lath."

SITUATIONS WANTED

CONTRACTING MANAGER.—Position wanted by man having 20 years' experience in structural-steel contracting and in fireproof construction work; excellent references; Address F. B., 2219 Green St., Philadelphia, Pa.

WANTED.—Young man, college graduate, five years' business experience, desires position with some good manufacturing concern; chance of promotion more important than salary; can furnish best of references. Address Box 232, Suffolk, Va.

SUPERINTENDANT WANTED

WANTED.—Superintendent, about 30 to 35 years of age, for ornamental and structural iron works; must have initiative and push; state age, experience and salary. Address No. 645, care of Manufacturers' Record.

MANAGER WANTED

WANTED.—General manager; must be high-grade man, competent to take full charge of salesmen, office and general oversight of business and capable of promoting a new implement enterprise; state experience fully and give references; salary second consideration to right party. Address Chas. M. Perrow, Box 237, Lynchburg, Va.

HELP WANTED

YOUNG MAN thoroughly experienced in electrical supplies to handle correspondence and do clerical work in a large jobbing house; must be good correspondent and have good English education, with some commercial knowledge. Give references and state salary expected. None but first-class need apply. Address P. O. Box 201, New Orleans, La.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical and Electrical engineering, and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), and Bachelor of Science (B.S.). Special courses in engineering and science. Splendidly equipped new engineering laboratories. Send for catalogues to Registrar.

ENGINEERS

P. BYRNE, Expert Mineral Engineer.—Investigations and reports made on the same. 1801½ 2d Ave., P. O. B. 111, Birmingham, Ala.

A CIVIL ENGINEER of long experience would like to communicate with commercial bodies, business, industrial or progressive leagues or clubs, and officials or individuals of any town or community in the Southwest or South where a need and opportunity exists for the establishment of an office for general engineering practice. The above party desires to give up salaried engagements and locate permanently for the practice of profession. If your town or county offers a field for the establishment of such an office, address No. 648, care Manufacturers' Record.

BANKS

THE CITIZENS' BANK OF NORFOLK, Va., capital \$300,000, surplus \$375,000, solicits accounts of banks, firms, corporations and individuals.

THE PALMETTO NATIONAL BANK, Columbia, S. C., capital \$250,000, solicits accounts of banks, firms, corporations and individuals either commercial or savings accounts.

COMMERCIAL STATE BANK, Birmingham, Ala. State depository. Prompt attention to Alabama collections.

BUSINESS OPPORTUNITIES

KNITTING MILL MANAGER WANTED.—Experienced man wanted to invest at least one-third of necessary capital and take management of knitting mill. Will start with 25 to 50 machines. Raymond Land Co., Raymond, Ga.

WANTED.—Manufacturers' agents in all sections of the country to send us plans and specifications for estimates on slate and tile roofing, on a liberal commission arrangement. Address Kansas City Slate & Tile Roofing Co., 21st and Forest Ave., Kansas City, Mo.

Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 24 lines. Allow seven words per line. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year, as follows: 100 lines, 18c. per line; 300 lines 16c. per line; 500 lines or more, 15c. per line.

WANTED to sell half interest in construction business to experienced engineer; \$5000 cash, remainder paid from profits. Purchaser to take charge of business. All construction work on commission. Address No. 649, care Manufacturers' Record.

CHANCE OF A LIFETIME to buy well-established retail drug store now paying 40 per cent. on money invested. For further information address E. C. D., P. O. Box No. 583, LaGrange, Ga.

WANTED.—To correspond with railroad contractors able to build and operate six miles of road, which investigation will show to be profitable. North Fork Lumber Co., Azalea, N. C.

TO REPRESENT YOU IN PITTSBURG.—Buying, selling, advertising, collecting; shipments inspected, differences adjusted; thoroughly reliable; bond furnished for any amount. Lydick, 530 Sheridan Ave., Pittsburgh, Pa.

OPERATOR WANTED.—First-class operator to cut and deliver 15,000 cords chestnut cord wood per annum for a period of three years; one who can furnish own outfit and men. The standing chestnut is located on tract of 2000 acres in Western North Carolina. This boundary contains practically all chestnut timber, and the estimate showed between fifty and sixty thousand cords available. The hauling is down grade. M. V. Richards, Land and Industrial Agent, Southern Railway Co., Washington, D. C.

FOR RENT.—AT LOUISVILLE, KY., the gateway to the South, business location on Fourth avenue, near Walnut street. This is the very heart of the fashionable retail section, near the New Seelbach Hotel, Stewart Dry Goods Co., and many other leading retail houses. For further information write Columbia Trust Co., 4th and Main streets, Louisville, Ky.

WANTED.—Partner in established and paying lumber business. None need apply but men of high character, experience and ability to take entire charge of manufacturing and purchasing department of large firm. Location, good healthy South Carolina town. Must have \$10,000 or more to invest in the business. Attractive proposition to right man. Address P. O. Box 328, Lynchburg, Va.

INTEREST in well-established and prosperous foundry and machine shop, with large woodworking plant attached, in Southern city, for sale; equipped with new and up-to-date machinery; want to retire from active business. Don't write unless you mean business and have \$30,000 to invest. Bank references given and required. Purchase of stock carries control of company. Address No. 561, care Manufacturers' Record.

GENERAL DRY GOODS.—In one of the best county site towns in Texas we have for sale, on account of the health of proprietor, one of the leading stores of the town. Stock is as clean as can be found anywhere. The business is in excellent shape, has splendid trade; owes nothing. This offers an exceptional opportunity for a live merchant to step into a paying business in one of the best locations in Texas, with unusually fine prospects for future growth. Investment required, about \$30,000. Might consider some in trade. Address for particulars, J. N. Winters & Co., Fort Worth, Texas.

LOCATIONS

GEORGIA'S FIVE-MILLION-DOLLAR-CROP COUNTY.—If you are thinking of changing your location to the South, investigate Sumter county, the heart of Georgia's richest agricultural section; crops 1909 aggregating \$5,000,000 in value: cotton, corn, oats, hay, fruits, vegetables, tobacco; finest lands in Georgia at \$10 to \$30 an acre. If interested, send for pamphlet and further information to Thos. Gamble, Jr., Sec. Board of Trade, Americus, Ga.

LOCATIONS WANTED

LOCATION for foundry and machine shop and manufacturing plant wanted in good town where same is needed; prefer to locate in North Carolina, Tennessee, Kentucky or Virginia. Address No. 646, care Manufacturers' Record.

HOTEL WANTED

AUSTIN, TEXAS, has the best location for a fine summer and winter resort hotel in the South. This is a much-needed improvement to Austin, and it is one that will be a payer from the start. Beautiful scenery, fishing, rowing, boating, and the finest drives in the country. Full particulars will be furnished on application to Will L. Vining, Secretary Austin Business League, Austin, Tex.

HOTELS FOR SALE

TOURIST HOTEL FOR SALE.—Books past three years subject to inspection. C. O. McLaughlin, Sanford, Fla.

FOR SALE.—A splendidly located 38-room furnished hotel at junction of two railroads in Oklahoma's oil belt. Small town with a future. Offered on account of sickness of owner. Address Frank West, Dustin, Okla.

INDUSTRIES WANTED

GARMENT FACTORY

ITASCA, situated in the heart of the great black land belt of Texas, wants a garment factory; growing town, with factories and schools. Address Board of Trade, Itasca, Texas.

KNITTING MILL

KNITTING-MILL LOCATION.—The people of a good North Carolina town where the conditions are favorable want a knitting mill. They will take stock in a proposition which will stand careful inspection. Refer to file No. 25,817. M. V. Richards, Land and Industrial Agent, Southern Railway, 1375 Pennsylvania avenue, Washington, D. C.

CANNING FACTORY

WHY DON'T YOU manufacture shipping cans in Houston, Texas? Great opportunity; large quantities shipped in for local consumption; one plant alone consumes 100 carloads annually; other consumers are six coffee-roasting plants, two wholesale preserving plants and two wholesale drug houses; truck and fruit growers also large consumers. The right time to get in is now. Write for information to Adolph Boldt, Secretary Houston Business League, Houston, Texas.

FLOUR MILL

FLOUR MILL OPPORTUNITY.—The citizens of a good Tennessee town in splendid wheat-growing country have raised \$15,000 towards the establishment of a flour mill, and desire a practical man with some capital to head the enterprise. The place has good railroad facilities, and mill can reach trade for a long distance. Refer to file No. 598. M. V. Richards, Land and Industrial Agent Southern Railway, Washington, D. C.

GLASS FACTORY

ATLANTA, TEXAS, WANTS A GLASS FACTORY.—We have an unlimited quantity of glass sand that analyzes over 99 per cent. silica; natural gas in any quantity at satisfactory price; salt and lime manufactured close by; plenty of timber and water and other material; free site, free sand 20 years, exemption from city taxation 10 years, free artesian water to the first factory; transportation and rates all right. Write for full particulars on this and other factory propositions. Great opportunities. Cass County Industrial League, Atlanta, Texas.

DRUGS AND DRY GOODS

FINE OPENING for wholesale drug business, also wholesale dry goods business; three-fourths of a million people within radius of 100 miles. In a territory only one-fifth developed, but being developed rapidly; first-class shipping facilities; best quality of water, cheap fuel and high-grade citizenship. Address Abilene 25,000 Club, Box No. 537, Abilene, Texas.

WOODWORKING PLANT

BAY CITY, TEXAS, wants a woodworking plant located there; has unlimited supply of good cottonwood and willow for excelsior, etc.; of fine ash for agricultural handles and for wagons and implements of all kinds, and the best of elm for barrel hoops; has three trunk lines of railway, good churches and schools, and is the center of the rice industry of Texas. If interested, address Ten Thousand Club, Bay City, Texas.

FURNITURE FACTORIES

DENISON, TEXAS, wants a furniture factory. Can offer free site with switch; exemption from taxation for considerable period. Transportation facilities unexcelled; eleven railroad outlets. Denison right in heart of hard-timber belt; oak, cottonwood and hickory in unlimited quantities within wagon-hauling distance. Water for factories at from two to five cents per thousand gallons, dependent upon quantity used. Considering the above advantages, especially the transportation facilities, the fact that there is not a factory of any size in the Southwest, and that this section is settling faster than any other at present, Denison is ideal location for furniture factory. For detailed information write Secretary Live Wires, Denison, Texas.

FURNITURE FACTORY.—Free site and liberal stock subscriptions for location of furniture factory of any kind. Abundance of raw material and unexcelled transportation facilities. Address Chas. R. Rowe, Secretary Lufkin Progressive League, Lufkin, Texas.

MISCELLANEOUS

FACTORIES WANTED.—Special inducements for manufacturing plants, particularly small industries, using wood, cotton or iron raw materials; mild healthful climate; cheap freights, fuel, labor and living expenses. We mean business and will do our part. Business League, Columbus, Miss.

A GOOD LOCATION for a hosiery mill, overall factory, iron foundry and similar enterprises; ample railroad facilities; inducements offered to the right parties. For information address the Stamford Commercial Club, Homer D. Wade, Secretary, Stamford, Texas.

QUANAH wants a cotton mill, meat-packing plant, shoe factory; large amount of stock ready to be taken or bonus given for any of these enterprises; four railroads; immense distributing territory; city growing 25 per cent. annually. Chamber of Commerce, Quanah, Tex.

FREE SITES and concessions on taxes, water and fuel given to factories to locate in McAlester, Oklahoma, the manufacturing city of the Southwest; cotton, fire clay, brick shales, iron, limestone, lumber and many other raw materials. Ask the Commercial Club, McAlester, Oklahoma.

SNOW HILL, MD., wants factories and canneries; cheap labor; no unions; no strikes; rich farming country; cheap raw material; railroad and water facilities; beautiful, healthy town; living expenses low; factories locating here always prosper. Address Dr. John L. Riley, Secy. Board of Trade.

VICTORIA, TEXAS, head of navigation of Guadalupe River; center of cotton, corn, truck and citrus fruit growing district of South Texas; country rapidly developing; opportunities for many industries. It is situated in the coastal section of Texas, write for booklet "ID" to the Secretary of the Progressive League.

TAMPA IS THE TOWN TO TIE TO.—Gateway to Gulf; nearest important American port to Panama canal; doubling population every four years; 100 per cent. city of South; big opportunities for investor, manufacturer, homeseeker; tourists' paradise. For literature address W. B. Powell, Secretary Board of Trade, Tampa, Fla.

MANUFACTURERS' OPPORTUNITY.—Free sites; no taxes; cheap natural gas; cheap coal; abundant water supply; best transportation; good town; opportunities for manufacture of furniture, woodenware and novelties, glass, tile and pottery, overalls, iron and steel products, carriages, etc. Write Board of Trade, Grafton, W. Va.

HOUSTON NEEDS a flour mill; free site on the great Houston Ship Channel; also free site for a hardwood manufacturing plant; unlimited raw material at hand; water transportation and seventeen rail lines, and the distributing center for the entire Southwest. Write Adolph Boldt, Secretary Houston Business League, Houston, Texas.

CLINTON, OKLA., wants packing plants, cotton mills, wholesale and jobbing houses of all kinds, manufacturing plants, brick plant, cement plant, ash and door factory, overall factory. Clinton, Okla., offers you first-class shipping facilities; freight rates that will compete with any town in United States territory; best undeveloped jobbing territory in the U. S. today; seven railroad outlets; exemption from municipal taxes, etc. Write Secretary Commercial League.

QUANAH—QUALITY.—City wants wholesale and manufacturing houses. Now have four wholesalers. Jobbers of drugs, dry goods, hardware, badly needed. Has the largest undeveloped trade territory of any city of less than 15,000 people in America. If you are looking for a jobbing center, cast your eyes on Quanah. Also want all kinds manufacturing industries. Three railroads, fourth under construction. Porter A. Whaley, Secretary, Quanah, Texas.

WANTED.—AT MENA, ARKANSAS, a growing city of 7000 people, a manager for a creamery to be installed by local capital; a brick-manufacturing plant, abundant raw material and fuel; a furniture factory; a handle factory; a box and fruit-package factory. The vicinity of Mena is exceptionally rich in fine hardwoods suitable for furniture and wagon stock and woodenware manufacture of every kind. Correspondence solicited. Address G. B. Wood, Gen. Agt. K. C. S. Ry., Mena, Arkansas.

WANTED.—Industries of all kinds to locate at Corey, the new model industrial city being built near Birmingham for the employees of the United States Steel Corporation. Water, electric current, coal, railroad facilities all convenient. Railroad frontage at very reasonable prices. Corey has a great future, equal almost to that of Gary, Indiana, and small industries locating there now will have every opportunity for expansion. United States Steel Corporation spending \$11,250,000 at and near Corey, \$1,500,000 to improve Corey being spent. Corey Land Co., 2024 Third Ave., Birmingham, Ala.

te and
of fur-
ance of
oration
cretary
exas.

Induce-
cularly
or iron
climate;
ing ex-
do our
ss.

ry mill,
similar
es; in-
es. For
ommer-
Stam-

at-pack
out of
ven for
ds; im-
growing
t Com-

a taxes.
o locate
cturing
y, brick
many
mercial

les and
strikes;
aterial;
eautiful,
actories
ress Dr.

ation of
n, corn,
trict of
veloping;
ix inter-
s, write
the Pro-

TO."-
Ameri-
popula-
city of
r, manu-
paradise,
l, Secre-

NITY. -
ral gas;
ly; best
rtunities
odenware
ry, over-
ges, etc.
Va.

free site
el; also
cturing
t hand;
rail lines,
e entire
Secretary
Texas.

g plants,
g houses
ts, brick
actory,
fers you
ht rates
the Mid-
ped job-
y; seven
municipal
mmercial

s whole-
ow have
ugs, dry
Has the
r of any
America.
uter, cast
all kinds
railroads,
Whaley,

NSAS, a
ger for a
apital; a
ant raw
actory; a
kage fac-
tionally
furniture
manufac-
ence so-
Agt. K.

to locate
city being
mployes of
t. Water,
ilities all
very wa-
t future,
ians, and
will have
United
\$11,250,000
improve
Co., 2024